

**University of Alberta**

**Europe going green? The European Union's promotion of a global  
mitigation norm on climate change**

by

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## **Dedication**

**To Sam, because of everything**

## **Abstract**

Greenhouse gas emissions need to peak by 2020 to avoid dangerous climate change. Yet, emissions are rising, particularly in emerging economies like China. A global agreement on curbing emissions, which includes all major emitters, is urgently needed.

Has the European Union (EU) contributed to the emergence of a global mitigation norm and if so, how? This dissertation analyses the EU's domestic leadership on climate change and assesses European diplomatic efforts in multilateral settings such as the 2009 Copenhagen summit and the EU's bilateral efforts vis-à-vis China.

For its theoretical framework, this dissertation draws on the Constructivist literature on norm diffusion and norm leaders and engages with the critiques that Constructivist research has neglected the political-economic context in which norms operate and the importance of domestic structures.

In the empirical analysis, the dissertation reveals that both environmental concerns, as well as ideas about the economic benefits for the EU of a 'first-mover advantage' of transitioning to a low-carbon economy, motivated the EU's self-proclaimed leadership on climate change. Yet, environmentalist organizations and the EU's negotiating partners do not perceive the EU as a climate leader, because they find that the EU's domestic climate policies lack ambition. The EU has not demonstrated how economic growth can be combined with reduced emissions, which contributed to the inability of EU foreign policy to promote an ambitious outcome during the Copenhagen summit and bridge divisions between the US and China. This multilateral failure did not prevent the EU from

bilaterally helping Chinese policy-makers understand that limiting emissions increases in China is compatible with economic growth in China.

This research relied on qualitative methods, which included 22 semi-structured interviews with both EU and non-EU policy-makers, observation as a delegate during the Copenhagen summit and an analysis of EU policy documents. Media coverage of climate-related policy developments supplemented my analysis of primary sources.

This thesis advocates a research strategy that combines analytic elements from different theories to explore how long-standing dichotomous categories like normative vs. material factors or the environment vs. the economy obfuscate rather than help our analysis of contemporary world politics.

## **Acknowledgement**

As individual and lonely an experience a PhD may be, my dissertation remains ultimately the result of a supportive community of people that made this final product possible.

My supervisor, Dr. Yasmeeen Abu-Laban, has been a crucial source of support throughout my five years as a graduate student at the University of Alberta. She has been there for me from the very beginning of my graduate experience. She encouraged me, a complete stranger visiting Edmonton from Brussels during the 2005 Christmas break, to apply for the PhD programme. She encouraged me through the highs and lows of the comprehensive exams and research process. She provided me with reference letters, feedback, etc. at crucial moments and always in the shortest time frame possible. When there were setbacks on the home front, I found her sincere sympathy lifted my spirits.

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For someone interested in climate change, living in Alberta's high carbon environment has been a challenge. Every morning at breakfast, I see the 'tar sands smoke' coming from the Sherwood Park refineries. Many an environmentalist feels like he/she is hitting his/her head against the brick wall of Alberta politics, which constantly favours the oil industry over other human, social and environmental concerns. Luckily, I found a 'safe haven' in the Department of Political Science at the University of Alberta, an oasis of friendly, intelligent and cooperative people. I feel that I gave little, but received a lot from this excellent department. I am particularly grateful to Dr. Laurie Adkin and Dr. Tom

Keating for their mentorship during the comprehensive exams. In what follows, I make an attempt to apply their high scholarly standards. A special thanks to Dr. David Kahane for allowing me to participate in his Alberta Climate Dialogue project, a courageous attempt to engage Alberta's citizens on this pressing issue. Last but not least, I am in Dr. Greg Anderson's debt for his patience in enduring my frequent rants about current events. He was a great 'neighbour' to have on the 11<sup>th</sup> floor of the Tory building.

Speaking of intelligent people, I owe a great deal of intellectual debt to George Monbiot. His book *Heat. How to Stop the Planet from Burning* sparked my initial interest in climate change. His moral clarity, innovative insights into age-old problems as well as his exemplary activism have remained a source of inspiration ever since.

A number of institutions provided invaluable practical and financial support: the Faculty of Graduate Studies and the Faculty of Arts at the University of Alberta, and the Social Sciences and Humanities Research Council of Canada. I also want to thank the Sierra Club of Canada for including me in their delegation to the Copenhagen climate summit. Dr. Sebastian Oberthuer and the Institute for European Studies at the Free University of Brussels very generously hosted me in their offices during my field research in Brussels. I also wish acknowledge my interviewees who spared their precious time with me.

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## **List of illustrations**

Illustration 1 (p. 17)

Contractions and Convergence approach, as proposed by the Global Commons Institute

## **List of Abbreviations**

AAU	Assigned Amount Unit
AWG-KP	Ad hoc Working Group on further commitments for Annex I Parties under the Kyoto Protocol
AWG-LCA	Ad hoc Working Group on Long-term Cooperative Action under the Convention
AOSIS	Alliance of Small Island States
BASIC countries	Brazil, South Africa, India and China
CBDR	Common But Differentiated Responsibilities
CCS	Carbon Capture and Storage
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CO <sub>2</sub>	Carbon Dioxide
COP	Conference of the Parties
DG	Directorate - General
ETS	Emission Trading System
ERU	Emission Reduction Unit
EU	European Union
G-8	Group of 8
G-20	Group of 20
G-77	Group of 77
GDP	Gross Domestic Product
GHG	Greenhouse Gas Emissions
GW	Gigawatt

GWP	Global Warming Potential
HFC-23	Hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
LDCs	Least Developed Countries
LULUCF	Land use, land-use change, and forestry
MEF	Major Economies Forum
MRV	Measurable, Reportable, Verifiable
MW	Megawatt
N <sub>2</sub> O	Nitrous Oxide
NAMA	Nationally Appropriate Mitigations Actions
NDRC	National Development and Reform Commission of the People's Republic of China
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
ppm	parts per million
UNFCCC	United Nations Framework Convention on Climate Change
UK	United Kingdom
UN	United Nations
UNSC	United Nations Security Council
US	United States
WHO	World Health Organisation
WTO	World Trade Organisation
WWF	World Wildlife Fund

## **Chapter I: Introduction**

*We are in the situation of driving an automobile with bad brakes toward a cliff . . . in the fog. The auto is the world's energy-economic system and the cliff is climate-change catastrophe. We don't know exactly where the cliff is because of the uncertainties in climate science – the fog – but that is hardly a consolation, or a reason not to try to slow down.*

John P. Holdren, President Obama's advisor for Science and Technology (quoted in Belfer Center for Science and International Affairs (2006))

*We need to get behind an emergency rescue of human civilization from the imminent and rapidly growing threat posed by the climate crisis.*

Al Gore (2008)

*The trains carrying coal to power plants are death trains. Coal-fired power plants are factories of death.*

James Hansen (2009)

### **I.1. Research question and core argument**

Has the European Union (EU) contributed to the emergence of a global mitigation norm and if so, how? Climate scientists have been telling the world that – unless greenhouse gas emissions are substantially reduced by 2020 – dangerous levels of climate change will become a reality and irreversible climate change will undermine the health, wealth and general well being of current and future generations. Despite the scientific evidence, as well as a range of options to reduce the world's emissions, few policy-makers in the world have been able to develop a comprehensive approach to climate change, which includes putting a price on emissions, driving greater energy efficiency and promoting low-carbon technologies. The EU is the only international actor that has taken on a self-proclaimed leadership role with regard to climate change. A year before the 15<sup>th</sup>

Conference of Parties in the context of the United Nations Framework Convention on Climate Change (UNFCCC), the Copenhagen climate summit in December 2009, the EU approved its Climate and Energy Package, which strengthened its Emission Trading System (i.e. the world's largest carbon market), approved legislation that will lead to greater energy efficiency in sectors like housing and transport and promoted the role of renewable energy in Europe's overall energy mix.

Of particular relevance are the EU's unilateral 20% mitigation target by 2020 and its conditional mitigation target to reduce its emissions by 30%, "provided that other developed countries commit themselves to comparable emission reductions and that developing countries contribute adequately according to their responsibilities and respective capabilities" (Council of the EU, 2009). By setting these targets, the EU's diplomacy attempted to avoid a 'lowest common denominator' result in Copenhagen by pushing all actors, including itself, to scale up its mitigation ambitions. In contrast, the diplomacy of other actors, both industrialized as well as developing states in the UNFCCC regime, has been pre-occupied with limiting their own commitments, pushing everybody else, except themselves, to scale up their mitigation ambitions. In the absence of any meaningful action on climate change and the lack of ambitious diplomatic initiatives from other jurisdictions, the EU's self-proclaimed leadership role and its efforts to promote a global norm on mitigation constitutes a fascinating puzzle for the discipline of International Relations.

The specific norm under investigation is a global mitigation norm, which imposes an obligation on states to reduce the emissions generated by their respective national

economies in order to avoid dangerous levels of climate change.<sup>1</sup> Following Katzenstein (1996, 54), norms are defined as “collective expectations about proper behavior for a given identity”. In the context of climate change, this means that a global mitigation norm expects all environmentally ‘proper’ states to tackle their emissions in the short to medium term. However, the emergence of this global mitigation norm is complicated by the fact that this norm cannot be uniformly applied to all states, as it assigns different responsibilities to industrialized and developing states: Industrialized states are expected to reduce their absolute emissions, whereas developing states are expected to only reduce future emission increases, i.e. reducing their relative emissions or carbon intensity of their economies. This categorisation of states in two groups, industrialized and developing states, reflects the principle of Common But Differentiated Responsibilities, as recognized in the UNFCCC<sup>2</sup> framework and the Kyoto Protocol<sup>3</sup>. All states are expected to tackle their emissions, but industrialized states are expected to take the lead in reducing their emissions more drastically in view of their historical responsibility for past emissions, their more advanced regulatory, financial and technological capabilities and their high per capita emissions levels, compared to developing states. To sum up, the global mitigation norm under investigation in this thesis reflects the Contraction and Convergence approach as advocated by the Global Common Institute (2009): Emissions of both industrialized and developing countries need to peak and decline as soon as possible (i.e. contract), but the former need to peak and decline earlier than the latter, ultimately converging to an equal level of per capita emissions. The chart below provides a graphical illustration of the implications of a Contraction and Convergence approach. To assess the EU’s contribution to such a

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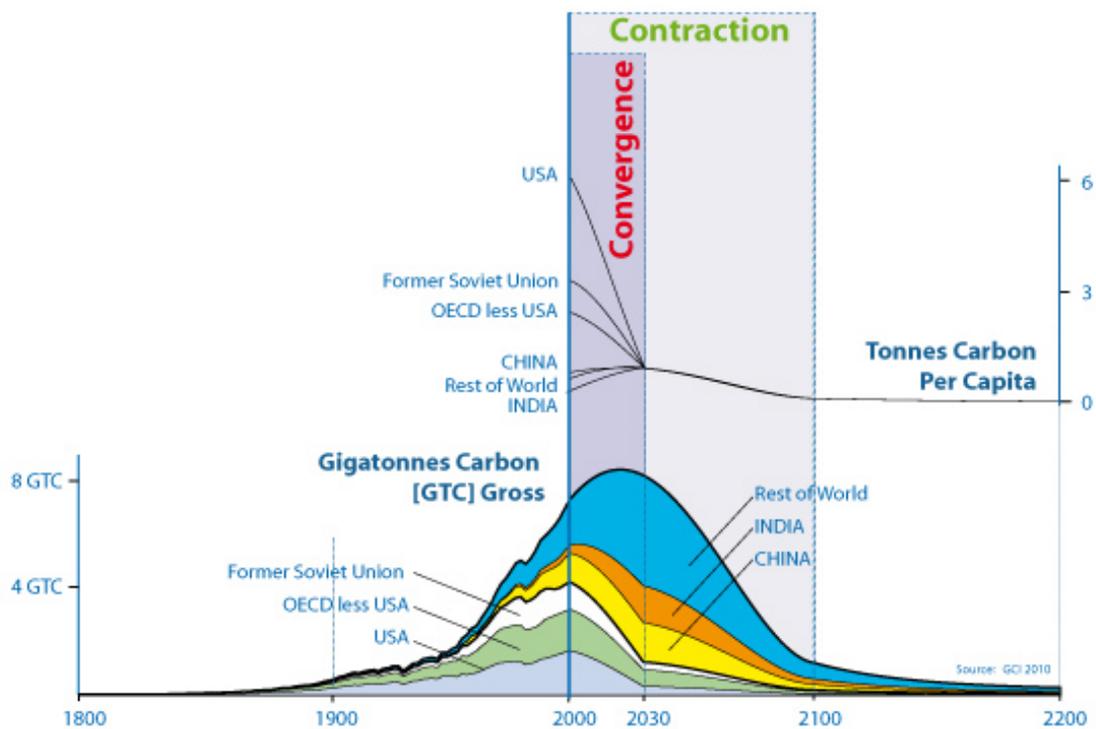
<sup>1</sup> In the context of climate change, mitigation refers to “a human intervention to reduce the sources or enhance the sinks of greenhouse gases” (UNFCCC Secretariat, 2009).

<sup>2</sup> United Nations Framework Convention on Climate Change (1992) Retrieved from [http://unfccc.int/essential\\_background/convention/items/2627.php](http://unfccc.int/essential_background/convention/items/2627.php)

<sup>3</sup> Kyoto Protocol (1997) Retrieved from [http://unfccc.int/kyoto\\_protocol/items/2830.php](http://unfccc.int/kyoto_protocol/items/2830.php)

global mitigation norm, this thesis will focus on the emission reduction strategies of the EU, China and other actors in the international climate regime and their mitigation targets in particular.

**Illustration 1: Contractions and Convergence approach, as proposed by the Global Commons Institute**



This example shows regionally negotiated rates of C&C.  
It is for a 450ppmv Contraction Budget, with Convergence by 2030.

Source: Global Commons Institute (2009)

In this study, I argue that the EU's leadership efforts to promote a global mitigation norm have only met with limited success in convincing other actors and the current world's

largest emitter in particular, the People's Republic of China,<sup>4</sup> to curb their emissions. This thesis finds that the EU's limited success as a global climate leader can be linked to the fact that the EU's own mitigation targets are not very ambitious, which casts doubts about the credibility of its leadership. Norm resisters within the EU, which claim that ambitious mitigation targets will negatively impact the EU's economic competitiveness, have been able to temper the ambition of the EU's mitigation targets. By setting insufficiently ambitious mitigation targets for itself, the EU has not sufficiently demonstrated how reducing emissions can be combined with continued economic growth. This is particularly relevant to persuade emerging economies like China to commit to limit their future emission increases. This perception of a clear discrepancy between the EU's leadership rhetoric and the modest ambitions of the EU's mitigation targets for 2020 is widespread, both among environmentalists as well as the main negotiating partners of the EU in the context of the UNFCCC. This 'policy incoherence' limited the EU's credibility as an 'honest broker' between the industrialized and the developing world – the United States (US) and China in particular – in the multilateral negotiations on climate change in Copenhagen in December 2009. Nonetheless, the EU has made some progress through the bilateral EU-China partnership on climate change in convincing China that reducing emissions does not necessarily contradict China's emphasis on continued economic growth.

## **I.2. Research problem**

As the quotes at the outset of this introduction make clear, describing climate change as 'the mother of all environmental problems' is not a hyperbole. Climate change already

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<sup>4</sup> Hereafter referred to as China. Since 2007, China's emissions have outstripped US emissions (Netherlands Environmental Assessment Agency, 2007).

has serious, negative impacts and unmitigated emission increases will push global temperatures higher and add further pressure on all ecosystems. Immediate action to cut emissions is required. In order to have a chance of avoiding dangerous levels of climate change, it is widely recognized that global emissions need to peak as soon as possible and that emission levels will need to be reduced substantially by 2020 and decline further after that date. An increase of 2 degrees Celsius above pre-industrial temperatures is widely regarded as a critical threshold. Staying within the 2 degrees Celsius range could enable “many of the worst projected ecosystems responses [to be] avoided” (Weaver, 2008, 231; Flannery, 2006, 169). In order to have a chance of avoiding dangerous levels of climate change above 2 degrees Celsius, greenhouse gas (GHG) concentrations in the atmosphere need to peak in the coming decades and need to be stabilized at 450 ppm CO<sub>2</sub>-eq. or below.<sup>5</sup>

Climate scientists, as members of the Intergovernmental Panel on Climate Change (IPCC), have not only warned policy-makers about the future impacts of climate change, but also indicated the timing, the location and the scale of emission reductions to be achieved in the next decade and beyond, to stay within 2 degrees of warming. The Fourth Assessment report of the Intergovernmental Panel on Climate Change (2007a, 775-776) includes a table (Box 13.7.), which states that industrialized states as a group would need to reduce their emissions to below 1990 levels in 2020 on the order of minus 25% to minus 40% below 1990 levels and to 80% to 95% below 1990 levels by 2050. Such a complete decarbonization of advanced industrialized economies would need to happen, even if developing countries with emerging economies in Asia, Latin America

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<sup>5</sup> For a more detailed overview of the science behind climate change negotiations and the 2 degrees mitigation target, see Appendix I.

and the Middle East substantially deviate from baseline scenarios about their future emissions.

**Table 1: Box 13.7: The range of the difference between emissions in 1990 and emission allowances in 2020/2050 for various GHG concentration levels for Annex I and non-Annex I countries as a group (IPCC, 2007a, 776).<sup>6</sup>**

Scenario category	Region	2020	2050
A-450 ppm CO <sub>2</sub> -eq	Annex I	-25% to -40%	-80% to -95%
	Non-Annex I	Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia	Substantial deviation from baseline in all regions
B-550 ppm CO <sub>2</sub> -eq	Annex I	-10% to -30%	-40% to -90%
	Non-Annex I	Deviation from baseline in Latin America and Middle East, East Asia	Deviation from baseline in most regions, especially in Latin America and Middle East
C-650 ppm CO <sub>2</sub> -eq	Annex I	0% to -25%	-30% to -80%
	Non-Annex I	Baseline	Deviation from baseline in Latin America and Middle East, East Asia

Unfortunately, these science-based mitigation targets are not reflected in any way in the international legal texts that are the basis for a global governance of the atmosphere. Currently, the Kyoto Protocol is the only international framework with legally binding emission targets for its Member States. However, the Kyoto Protocol has three main

<sup>6</sup> For an overview of the Annex I group of industrialized states and their commitments under the Kyoto Protocol, see Appendix II.

flaws. First, the Protocol imposed limits on industrialized states to jointly reduce their emissions to 5.2% below 1990 levels in the period from 2008 to 2012. While legally binding, the Kyoto Protocol is widely regarded as a “toothless tiger”, because the 5.2% joint reduction target for industrialized states “is little more than irrelevant”, compared to what climate scientists have called for (Flannery, 2006, 224). Secondly, the US was – until 2007 – the largest emitter of GHG emissions, but did not ratify the Kyoto Protocol. As a result, the US had no obligation under international law to curb its emissions. Thirdly, and directly related to the Americans’ obstructive policies in the global climate change regime, the Kyoto Protocol does not set any targets for developing states. Yet, figures from the International Energy Agency (2009, 56-58) show that the major increases in emissions over the last 20 years occurred in emerging economies like China, India and Brazil, by 153.2%, 129.1% and 72.1% respectively. Chinese emissions increased from 2.405 to almost 7.000 million tonnes of CO<sub>2</sub>, while emissions from Member States of the Organisation for Economic Cooperation and Development (i.e. industrialized states) increased ‘only’ by 17.4% (with major variations between them) (International Energy Agency, 2009, 56-58). China became the world’s largest emitter of CO<sub>2</sub> in 2007 (Netherlands Environmental Assessment Agency, 2007). According to Raupach *et alia* (2007, 10292), developing countries as a group “accounted for 73% of global emissions growth in 2004”. The rapid growth in emissions means that it is essential to also limit emissions increases in developing states, in particular the so-called ‘emerging markets’ like China.

As the Kyoto Protocol is set to expire at the end of 2012, policy-makers engaged in negotiations to tackle these three main challenges with regard to mitigation.<sup>7</sup> The Conference of the Parties in the UNFCCC framework started negotiations on a new treaty almost immediately after the Protocol's entry into force in 2005. At the end of 2007, the 13<sup>th</sup> Conference of Parties agreed in Bali on a Bali Action Plan, which confirmed a structure for the negotiations as well as a timeline. The negotiations were to be finalized during the 15<sup>th</sup> Conference of Parties in Copenhagen in December 2009. This deadline led to an intensification of international discussions on climate policy from early 2008 until the end of 2009. This period of global negotiations on a new post-2012 treaty on climate change and its immediate aftermath in the first half of 2010 provides a compelling backdrop for exploring how a global mitigation norm is (or is not) emerging. These negotiations involve a broad range of issues such as climate finance, technology transfer, deforestation, and so on. The analytical focus of this dissertation is specifically on the issue of mitigation and a global mitigation norm, which would oblige states to substantially reduce their emissions or emissions increases in the coming decades, by 2020 for example.

### **I.3. Theoretical framework: Constructivism**

To investigate the progress towards a global mitigation norm and the role of the EU in that respect, insights from Constructivism can focus our attention on how normative considerations influence international political outcomes. Constructivism is an approach to study international politics, which holds that “the manner in which the material world shapes and is shaped by human action and interaction depends on dynamic normative

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<sup>7</sup> For a chronological overview of all climate-related events between 2006 and 2010 pertaining to the EU and China, see Appendix IV.

and epistemic interpretations of the material world” (Adler, 1997, 322). Choosing Constructivism as the theoretical framework for this research shifts the focus away from the regime theorists’ traditional preoccupation with the efficiency of international environmental regimes. According to regime theorists, “norms get institutionalized because such arrangements provide benefits (such as information in an uncertain world) that outweigh the opportunity costs of foregoing immediate action in their short-term interests” (Klotz, 1995, 25). This focus on Pareto-optimal results in the research on environmental regimes is in line with “the emerging infatuation of political scientists with economic methods in the late 1970s and 1980s”, whose research was focused on utility functions for explaining state behaviour in international environmental discussions by drawing “on microeconomic analyses of collective action games (Prisoner’s Dilemma, Stag Hunt)” (Finnemore & Sikkink, 1998, 889). However, this economic take on how states have tried to tackle global environmental problems leaves out the quintessentially political issues: “Instead there is a dominant concern with institutional efficiency and regulation: governance without the politics” (Vogler, 2005c, 56).<sup>8</sup>

The focus of Constructivism on how global norms affect foreign policy can refocus our attention on the *politics* of international climate change negotiations. By choosing the various “normative and epistemic interpretations of the material world’ (Adler, 1997, 322) as its analytical starting point, Constructivism is well-positioned to explore how a wide range of motivations can inform foreign policy, varying from short-term material self-interest or more enlightened forms of self-interest, but also “self-affirmation (we like to feel good about ourselves), and group interest (we like to make our friends happy)”

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<sup>8</sup> Even regime theorists that use rational choice models admit that their focus on e.g. Pareto-optimal results in two-level games during climate change negotiations “is only a crude picture of international interactions, used for parsimony, since the qualitative character of the main results remains for more complex negotiation games [at the international level]” (Kroll & Shogren, 2008, 579).

(Klotz, 1995, 13). This understanding of international political actors as potentially different from the *homo economicus* is particularly useful when exploring the normative rhetoric of European politicians that has accompanied the EU's leadership position on climate change.

Secondly, climate change has important economic dimensions, particularly for the structure of the world's future energy supply. However, climate change also has other – one could argue more important – ethical dimensions that revolve around how global negotiations on climate change will guarantee fairness with regard to the access of different states to a global commons like the atmosphere. For Harold Lasswell (1936), politics is about “who gets what, when, how”. Climate politics are no exception to this and distributional questions have been at the centre of global environmental negotiations since the very beginning in the early 1970s, particularly the fairness of the current distribution of ‘environmental space’. Paraphrasing Harold Lasswell, a global mitigation norm can only emerge, if the international community resolves the thorny issue of which states will cut emissions, by how much and by what deadline and the equity of the negotiated distribution. However, deep divisions between two broad groupings, the industrialized states (the North) and developing states (the South), about their respective responsibilities to reduce emissions have prevented major breakthroughs in climate negotiations over the past two decades. A Constructivist focus on a global mitigation norm is well suited to transcend the apolitical, regime-theoretical analyses of such negotiations and explore, for instance how the EU has engaged in debates about the UNFCCC's notion of the Common But Differentiated Responsibilities (CBDR) of industrialized and developing states.

Thirdly, the use of Constructivism as the theoretical framework for this research does not mean that – by focusing on the politics of climate change – the economic dimensions of the issue are neglected. On the contrary, this theoretical framework enables this dissertation to tackle the issue of the respective importance of environmental vs. economic considerations for the EU’s foreign policy on climate change. Concerns about environmental pollution such as GHG emissions have always competed for space on the political agenda with other priorities, such as economic competitiveness in a globalizing world economy, energy security, budgetary constraints, and so on. Vogler (2005c, 57) reminds us that “environmentally beneficial policy is habitually trumped by security and economic priorities”. However, an improved scientific understanding of the causes and the (costly) impacts of climate change as well as a worldwide mobilisation of civil society on the issue could change that equation, and technological innovations in an area like renewable energy can reduce the costs of the transition to a low-carbon economy. In addition, economic tools such as emissions trading and carbon markets play a large role in the global governance on climate change. Constructivism also permits an analysis of the normative underpinnings of such market-based instruments, their effects in terms of actually reducing emissions and their contribution to building momentum for the emergence of a global mitigation norm.

Having justified my choice for Constructivism as the overarching theoretical framework for this thesis, I now clarify how Constructivism helps to answer my central research question of whether and how the EU has contributed to the emergence of a global mitigation norm.

Constructivists have not only demonstrated that ‘norms matter’, but also addressed how norms can transform politicians’ understandings of what can be considered to be in the

national interest. Constructivist research has demonstrated how a number of actors and mechanisms influence the power of norms. Norm entrepreneurs and epistemic communities have received much attention in Constructivist research, as is explained further in the literature review. This thesis focuses mainly on the role of the EU as a norm leader and the ways in which European diplomatic efforts tried to persuade other actors to commit to a global mitigation norm. Constructivist scholarship has identified a number of specific mechanisms that can help the process of norm diffusion. I now outline the mechanisms for norm diffusion that are particularly relevant for my analysis of the EU as a norm leader.

Constructivist scholars have not elaborated much on the role of norm leaders in norm diffusion, focusing rather on the contributions of non-state actors. I draw on the literature on the importance of leadership in global environmental governance and I argue, first of all, that the EU's climate leadership is highly dependent on the EU's ability to 'lead by example'. More concretely, this means that the EU needs to demonstrate how it has successfully realized a substantial reduction of emissions, while not compromising economic growth and the competitiveness of its economy. In other words, the EU needs to showcase a 'first-mover advantage' of moving to a low-carbon economy. This is particularly relevant for an issue like climate change, where the divisions between North and South run deep and accusations of environmental colonialism frequently dominate negotiations. There is a clear expectation for advanced industrialized states - and especially the EU due to its leadership rhetoric - to take the lead in reducing their emissions first and setting ambitious mitigation targets.

Secondly, environmental norms such as a global mitigation norm do not operate in a political vacuum and are far more contested than other norms "making universalistic

claims” such as human rights norms or those dealing with security issues (Finnemore & Sikkink, 1998, 907). As mentioned earlier, a global mitigation norm will be contested by more prominent economic norms that emphasize economic growth and energy security within any domestic context. This thesis argues that ‘framing’ a global mitigation norm to fit with dominant economic norms will determine the success of a global mitigation norm. This will be the case in the EU, but also in emerging economies like China, where environmental norms are even more contested. Using Bernstein’s (2001) concept of “social fitness”, I will argue that the EU has framed a global mitigation norm and the need to tackle China’s growing emissions such that it fits with China’s domestic political discourse of emphasizing economic development.

Thirdly, Constructivists have stressed the importance of cognitive evolution in explaining norm diffusion (Adler, 1997, 339-340; Ruggie, 1998, 868) and developed theory about when learning takes place at the international level. Especially in state-above-society polities like China, Checkel (1999, 91) argues that complex learning is the “the micro-mechanism translating norms to agents”. As China’s policy-making on climate and energy is highly centralized, I ask how the EU has contributed to such complex learning among China’s political elites. Exploring this learning process in the bilateral EU-China dialogue on climate change, I argue that the EU has used the right frames to contribute to a learning process in China that increasingly views lower emissions as compatible with economic growth in China. Constructivists like Finnemore (1996a, 5) demonstrated how international institutions function as teachers that help states learn about their interests. This thesis will ask whether EU investments in international offsets mechanisms like the Clean Development Mechanism (CDM) did not only contribute to the distribution of low-carbon technology through specific CDM projects, but also helped to push ideas about the economic benefits of a low-carbon economy in China.

A fourth and final element concerns the important contribution that international law can make in the diffusion of a global mitigation norm. Constructivists like Finnemore and Sikkink (1998, 900) argue that the institutionalisation of an emergent norm “in specific sets of rules and organisations”, such as international law and the rules of multilateral organisations, can greatly help a norm to become more widely accepted in the international community “by clarifying what, exactly, the norm is and what constitutes violation [...]”. However, a global mitigation norm such as Contraction and Convergence imposes different levels of responsibility on states, depending on whether states are categorized as advanced industrialized states or as developing countries. Both the UNFCCC and the Kyoto Protocol include the principle of Common But Differentiated Responsibilities (CBDR), but the North and South remain deeply divided about the implications of this CBDR principle. For example, the US wants the climate negotiations to focus on recent and future emissions trajectories, in particular those of emerging economies, whereas China emphasizes past emissions and the West’s historical responsibility for climate change. Constructivists have argued that “norms that are clear and specific, rather than ambiguous and complex, and those that have been around for awhile, surviving numerous challenges, are more likely to be effective” (Finnemore & Sikkink, 1998, 907). Legro (1997) developed the concept of “norm robustness” to help our understanding of why some norms are more successful than others. This thesis will demonstrate how the different interpretation of the CBDR principle by the US and China complicated the EU’s efforts to promote a global mitigation norm before and during the Copenhagen climate summit.

To sum up, this thesis aims to research whether the EU has contributed to the emergence of a global mitigation norm and the ways in which the EU has contributed to

this norm diffusion. Constructivists have conceptualized different mechanisms that can contribute to this norm diffusion, such as displaying a high level of policy coherence, using the right frames, promoting complex learning and developing the 'robustness' of international law. By applying this framework to the case of the EU's multilateral and bilateral diplomatic engagement with China on climate change, this thesis seeks to further advance the Constructivist research agenda, particularly in the field of Global Environmental Politics.

#### **I.4. Case selection**

The role of the EU cannot be ignored in an analysis of how a global mitigation norm is emerging, be it in fits and starts. The EU has been very active in multilateral negotiations on climate change, particularly since the American refusal in 2001 to ratify the Kyoto Protocol. With regard to the negotiations and the entry into force of the Kyoto Protocol, the EU's leadership role has been widely recognized, also in the International Relations literature (Gupta & Grubb, 2000; Bretherton & Vogler, 2006; Scheipers & Sicurelli, 2007; Oberthuer & Kelly, 2008; Lenschow & Sprungk, 2010; Parker & Karlsson, 2010; Uusi-Rauva, 2010). The EU's role as an engine for peace and prosperity remains powerful in Europe, but European leaders have made a conscious attempt to improve the EU's legitimacy in the eyes of European public opinion by emphasizing that the EU is 'doing the right thing' for the environment and climate change in particular. The EU expressed a clear interest in building on this reputation in the negotiations on a post-2012 climate change framework. The 27 Member States of the EU approved a Climate and Energy Package in a record time of only 18 months, from the initial Commission proposal in early 2008 to its entry into force in mid-2009. This Climate and Energy package commits

the EU to a series of domestic, EU-wide targets, the so-called "20-20-20" targets (European Commission, 2010f):

- A reduction in EU greenhouse gas emissions of at least 20% below 1990 levels
- 20% of EU energy consumption to come from renewable resources
- A 20% reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency.

This Climate and Energy Package is primarily focused on shifting the EU's own economy onto a low-carbon trajectory. Beside this domestic dimension, the Climate and Energy package is also an integral part of the EU's foreign policy on climate change. By taking action within the EU, the Commission (2007, 5) made clear that this domestic action "will allow the EU to show the way in international negotiations" by "[showing] that it is possible to reduce GHG emissions without jeopardising economic growth and that the necessary technologies and policy instruments already exist". The timing of the entry into force of the major legislative package – six months ahead of the Copenhagen climate summit – was no coincidence: Unilateral commitments by the EU in the Climate and Energy Package were intended to be a demonstration for other actors, who had yet to announce mitigation targets or implement legislation. In fact, the EU remains the only actor among all other industrialized states that has gone beyond policy announcements on climate change. The US, Canada, Japan and Australia all announced mitigation targets, but they are far less ambitious and legislative action to implement them remains stalled.

Thus, this dissertation focuses, first and foremost, on the EU. As the central research question makes clear, this thesis is interested in whether and how the EU contributes to a global mitigation norm. To answer this question, I explore different dimensions of the EU's efforts to promote a global mitigation norm. This requires an analysis of how a

global mitigation norm has influenced the ‘domestic’ political debates on climate policy within the EU, and also of how other non-EU actors perceive the EU’s leadership and its commitment to a global mitigation norm. By taking both an internal and external angle, we get a better sense of the EU’s commitment to a global mitigation norm.

In addition, my research engages in a case study of the EU’s diplomatic efforts to promote a global mitigation norm vis-à-vis China, currently the world’s largest emitter of GHG emissions. The focus is on the EU’s use of both multilateral and bilateral diplomatic channels, as well as the effects of carbon markets like the EU’s Emission Trading System (ETS) on China. In many ways, China’s is “the world’s best hope [and] worst fear regarding the climate crisis” (McCarthy, 2010). Without engaging China to limit its emission increases, there is no chance of avoiding dangerous climate change. Apart from this ‘inconvenient truth’, the case of China is also theoretically relevant. China as a potential norm follower can be considered a critical case to learn about the EU’s ability to promote a global mitigation norm and global (environmental) norms more generally. Flyvbjerg (2006, 229) defines a critical case as a case that “[has] strategic importance in relation to the general problem”. Critical cases enable scholars to formulate a generalization of the sort, “If it is valid for this case, it is valid for all (or many) cases”, or in its negative form, “If it is not valid for this case, then it is not valid for any (or only few) cases” (Flyvbjerg, 2006, 230). However, Flyvbjerg (2006, 231) warns that defining a critical case is easier than identifying one:

“[N]o universal methodological principles exist by which one can with certainty identify a critical case. The only general advice that can be given is that when looking for critical cases, it is a good idea to look for either “most likely” or “least likely” cases, that is, cases likely to either clearly confirm or irrefutably falsify propositions and hypotheses”.

I argue that the EU’s efforts to persuade China to adopt mitigation targets constitutes a

'least likely' case for the following four reasons. First of all, China has a long tradition of emphasizing economic growth over environmental protection, going back to Mao Zedong's 'war against nature' (Shapiro, 2001). This complicates the EU's message to China of the need to improve environmental protection and curb its growth in emissions. Secondly, China's foreign policy has traditionally emphasized the 'five principles of peaceful coexistence', one of which is mutual non-interference in each other's internal affairs (Zaborowski, 2006, 65 & 79; Lanteigne, 2009, 24).<sup>9</sup> This cornerstone of Chinese foreign policy complicates the EU's attempts to influence China's climate and energy policies: Chinese leaders expect other countries to respect their sovereign right to decide what is in China's best interest, in particular on sensitive issues like energy. Thirdly, in the previous negotiations on the Rio Convention and the Kyoto Protocol, China joined the efforts of the G-77 alliance of developing countries to resist any external limitations on their right to develop their economies. With regard to the negotiations on a post-2012 follow-up to the Kyoto Protocol, China has repeatedly emphasized the principle of Common But Differentiated Responsibilities already enshrined in the UNFCCC and the Protocol. For China, this means that the negotiations should be primarily about mitigation targets for industrialized states, because these states have a historical responsibility for causing climate change and the relatively low per capita emissions of states like China, compared to industrialized states. Last but not least, China's high rates of economic growth and the growth of energy intensive industries such as the steel and construction industry, have led to a surge in its emissions. Finally, China's ability to curb this trend is limited, because coal-fired power plants – one of the most carbon intensive forms of energy production – account for about 80% of China's power production (Steinfeld *et alia*, 2008, 2). This factor further

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<sup>9</sup> The other four are mutual respect for sovereignty and territorial integrity, mutual non-aggression, equality and mutual benefit, and peaceful coexistence.

complicates the EU's objective of committing to China to limit its emission increases under international law. This 'least likely' case study will help to verify and build on existing Constructivist research on norms, giving us further empirical material to assess the variables that determine the effectiveness of EU's leadership role in global environmental negotiations and its foreign policy more generally.

The EU and China are the central focus of this research, but I do not ignore the role played by the US. However, American foreign policy on climate change and its reluctance to engage in a meaningful way in the UNFCCC framework have been extensively covered elsewhere (Agrawala & Andresen, 1999, 2001; Harris, 2000, 2001; Hovi *et alia*, 2003; Steurer, 2003; Schreurs, 2004; Jacques, Dunlap & Freeman, Tjernshaugen, 2005; 2008; Hovi & Skodvin, 2008; Sovacool, 2008; Fletcher, 2009; Skodvin & Andresen, 2009; Bang, 2010; Lizza, 2010; Oreskes & Conway, 2010; Skodvin, 2010; Wapner, 2010). Though this dissertation focuses on the EU and China, I understand that "the US remains an extremely important external parameter to understand EU-China dynamics" (Peruzzi *et alia*, 2007, 2). For example, Chapter V extensively covers the role of US foreign policy under President Obama before and during the Copenhagen climate summit. It was the lack of interesting policy developments on climate change and low-carbon energy in the US that led to my decision to focus on the EU and China, where the fight against climate change has evolved more in the last few years.

### **1.5. Method of inquiry**

Apart from an in-depth case study of Sino-European diplomatic interactions on climate change, this thesis also engages in a discursive analysis to study a wide variety of policy

documents, interviews, media coverage, and so on.<sup>10</sup> Discourse analysis comes in many guises, but is generally geared towards enabling a researcher “[to] capture the creation of meanings and accompanying processes of communication” (Klotz & Lynch, 2007, 19). In this thesis, discourse analysis of interviews or speeches is mainly used to situate the selected texts in their wider intersubjective context by “[f]ocusing on consistencies in assumptions within decision-making processes – evident in discourses [...]” (Klotz, 1995, 33). By identifying the shared assumptions underlying recent changes in the prevalent political discourse on climate change, particularly how to balance reduced emissions with economic growth or the ‘first-mover-advantage’ of the EU’s climate leadership, such a discourse analysis can help identify the link between a global mitigation norm, on the one hand, and policy actions on climate change, on the other.

As to the sources used, I first engaged in a review of the literature on the topic. Subsequently, I performed a discursive analysis of a wide range information sources, particularly primary policy documents, such as communications of the European Commission, conclusions of the Council of Ministers and the European Council and EU-level legislation. Other primary documents included speeches, op-ed articles and press releases by European policy-makers. Apart from the ‘official’ EU-level sources, publications by European environmental NGOs and business organizations also informed my analysis. As I am not fluent in Mandarin or Cantonese, I relied on English translations of key Chinese policy documents, which have been made available by the Chinese government or environmental NGOs with an interest in China.

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<sup>10</sup> A more extensive discussion of the methodology of this dissertation can be found in Appendix III, Research Methods Appendix

My field research was conducted over a period of two months, from December 2009 to January 2010. I attended the Copenhagen summit from start to finish (December 7-19, 2009) as a delegate of a Canadian environmental NGO, the Sierra Club of Canada. Academic/NGO delegates do not have access to the high-level meetings of multilateral summits on climate change. Nonetheless, I gained an important understanding of such negotiations and gathered otherwise inaccessible information. For example, I was able to record several press conferences by senior Chinese diplomats in Copenhagen. In addition, I conducted 22 interviews with policy-makers in Brussels in January 2010, which included all major stakeholders in the EU's climate and energy policies: Diplomats from EU Member States (both large and small), European Commission officials, UNFCCC officials, missions of non-EU Member States to the EU as well as policy officers of environmental NGOs and industry organisations. Interviews usually lasted just under one hour and were mainly conducted in the interviewee's office. I adopted a semi-structured format for these interviews.<sup>11</sup> By using a predetermined set of questions, I ensured that the same general information was collected during each interview, while still permitting me to tailor the actual interview to the interviewee's priorities. A discursive analysis of these interviews enabled me to verify whether my reading of the official documents was correct and to probe matters that were not directly addressed in official sources.

Apart from my own observation and analysis, I relied on the media as a source of information. Two traditional media sources were particularly useful because of their excellent coverage of environmental issues, namely the English language newspapers *The Guardian* (United Kingdom) and *The New York Times* (US). For Chinese coverage

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<sup>11</sup> See interview protocols in Appendix V

of climate-related news, I tracked the *People's Daily Online* in English. The *People's Daily Online* is a news website, published by China's Communist Party and consistently communicates the official government stance. Other web-based media outlets included *Point Carbon*, which provides specialized coverage of recent developments related to carbon markets. The *Euractiv* website allowed me to track policy developments at EU-level. Reports by both American and European environmental NGOs were also key sources of highly specialized information. For example, reports by European environmental NGO Sandbag were instrumental in finding out the inner workings of the EU's ETS.

#### **I.6. Outline of the dissertation**

To sum up, the purpose of my research is to assess whether the EU has contributed to the emergence of a global mitigation norm and if so, how? The theoretical framework, Constructivism, adopted to guide this research and briefly introduced here, will be further elaborated in the second chapter, the literature review. Arguing that Constructivism has somewhat neglected to engage with the sub-discipline of Global Environmental Politics within International Relations theory, the literature review outlines how Constructivist concepts such as norms, norm leaders and norm diffusion can help us gain a better insight into the factors that influence how global environmental norms evolve. In addition, the literature review situates this work within the burgeoning literature on the role of two emerging powers in world politics, the EU and China, as well as the more recent literature on EU-China relations.

By examining the internal debate about the ambition of the EU's own mitigation targets, the third chapter asks how far a global mitigation norm has progressed within the EU

and its influence on the development of EU-level climate and energy policies. Engaging with Ian Manners' concept of Normative Power Europe and its critiques, I explore the question whether the EU is "predisposed to act in a normative way in world politics" (Manners, 2002, 252), in a way that departs from traditional state actors' pursuit of national interests. This would lead the EU to prioritise environmental concerns about climate change over other political priorities. I argue that a conceptualisation of the EU as Normative Power does not fit well with the EU's leadership on climate change for two reasons. First of all, a concept like Normative Power Europe fails to acknowledge the considerable diversity among EU Member States in terms of their readiness to reduce their emissions. Secondly, environmental concerns about climate change and the need to set science-based mitigation targets to stave off the worst impacts of climate change do guide the EU's climate policies. However, the political-economic context in which these climate policies are developed is equally – if not more – important. European policy-makers increasingly believe in an economic 'first mover advantage' for the EU of moving to a low-carbon economy, but some Member States, in particular the new Member States in Eastern Europe, mount 'norm resistance', as they fear that ambitious unilateral mitigation targets will undermine their economic potential. I conclude that a global mitigation norm is not as widely shared within the EU as the EU's own rhetoric about its role as a leader on climate change leads us to believe, understanding the political-economic context in which decisions are made on the EU's climate policies is key to researching the EU's leadership position.

Building on this finding that there is a gap between the leadership rhetoric of key European politicians and the EU's internal discussions, I explore whether other, non-EU actors in the UNFCCC framework perceive the EU as leader on climate change, particularly in its advocacy for a global mitigation norm. Combining Constructivist

literature on norm diffusion with the literature on political leadership in global environmental negotiations, I argue that a high degree of ‘policy coherence’, defined by Lightfoot and Burchell (2005, 88-90) as “coherence between its external commitment and its internal policies”, is a key factor for the EU to be an effective leader on climate change. I assess the EU’s policy coherence on climate change in three areas: the compliance of the EU and its Member States with their joint target under the Kyoto Protocol, the ambition of its 2020 targets and its reliance on international offsets for meeting these targets. I conclude that there is a widespread perception of a gap between the leadership rhetoric of the EU and the lack of ambition of its internal mitigation targets.

In the fifth chapter, I ask how the EU tried to promote a global mitigation norm at the multilateral level in the lead-up to and during the Copenhagen climate summit in December 2009, with a particular focus on the interactions between the EU and China. The result of the 15<sup>th</sup> Conference of Parties – the non-binding, Copenhagen Accord – stayed well below the EU’s ambitions for Copenhagen. The EU’s proposals, for instance its conditional commitment to increase its own mitigation target from 20% to 30% reduction, did not create the intended effects of convincing other states to scale up the ambition of their mitigation targets. I argue that the EU’s failure to produce a more successful outcome in Copenhagen results from its inability to bridge the divergent interpretations of the UNFCCC’s principle of Common But Differentiated Responsibilities (CBDR) among industrialized and developing states that have characterized multilateral negotiations on climate change. The relatively low level of ambition in reducing emissions made it difficult for the EU to differentiate itself from other industrialized states like the US and serve as an ‘honest broker’ that could reconcile the conflicting positions of the world’s two largest emitters, the US and China. Moreover, China’s negotiation

position – shared with the G-77 group of developing states – has the West’s historical responsibility as its premise, which requires industrialized states to substantially reduce their emissions *first*, before developing states. This further complicated the EU’s ability to push for a global mitigation norm.

While the EU was unable to push China towards greater acceptance of a global mitigation norm at the multilateral level, the EU also engaged bilaterally with China on climate change through the 2005 ‘EU-China Partnership on Climate Change’. This is the topic of the sixth chapter. Herein, I ask how the EU has used bilateral diplomacy to influence China directly to tackle climate change and develop more ambitious mitigation policies. The theoretical frame of this chapter addresses Constructivism’s neglect of the importance of domestic political structures as important variables to explain variation in norm diffusion. I argue that, through the EU’s bilateral climate diplomacy, China’s elite policy-makers have engaged in a learning process that limiting China’s emission increases can be compatible with economic growth and improved energy security for China. The EU has helped to raise awareness about the economic costs of the impacts of climate change and the potential of ‘green growth’. In addition, the EU has also framed low carbon energy sources such as ‘clean coal’ with Carbon Capture and Storage (CCS) and renewable energy as reconcilable with Chinese concerns about energy security. Last but not least, EU investments in Clean Development Mechanism projects in China have helped to build a domestic bottom-up constituency in China interested in low-carbon development. The EU framed its demand for more ambitious mitigation targets in China in line with the prevalent domestic discourse about economic growth and energy security. I conclude that, in doing so, the EU has contributed to a greater interest in China in limiting the growth of its emissions.

In the final, seventh chapter, I review the findings of the previous chapters and assess their contribution to International Relations scholarship and our understanding of how a global mitigation norm is emerging and the role of the EU therein. I consider the cogency of Constructivist theory in analyzing global environmental issues like climate change and suggest new avenues for research. First, I advocate for Constructivist scholars to include the global and local political-economic context in their analyses of how norms, and environmental norms in particular, operate. Second, future research should recognize that global discussions on how to tackle climate change increasingly call into question traditional categories in International Relations theory, such as the environment vs. the economy, normative vs. material factors, North vs. South, public vs. private actors, domestic vs. foreign policy, and so on. This dissertation demonstrated that these concepts are becoming more and more fluid. To conclude, I chart policy recommendations for the future of climate policy, specifically for the EU.

## **Chapter II: Literature review**

### **II.1. Introduction**

Apart from the specific focus on climate change, the EU and China, I wish to contribute to a broader research agenda that explores how global norms and environmental norms, in particular, emerge. The combination of a growing world population with a rapidly intensifying economic globalisation has led to major global environmental challenges that are having a profound impact all around the planet. The combination of many environmental problems (bio-diversity loss, endangered species, acid rain, ozone depletion, air and water pollution, desertification, hazardous waste, nuclear safety) is no longer a minor concern for people and governments. These environmental problems are increasingly recognized as potentially undermining the health, wealth and general well-being of current and future generations and spurred a great deal of legal developments, international treaties in particular. This rapid development has sparked the interest of many scholars, establishing Global Environmental Politics as its own sub-discipline within the broader disciplines of International Relations and Comparative Politics.

Six major research themes can be identified in this broad literature: international environmental regimes, the international political economy of environmental problems, environmental security, environmental non-governmental actors, the role of environmental science/knowledge structures and ethical considerations as they relate to environmental pollution (Dauvergne, 2005, 13-20). The first two themes are the original core of the field of Global Environmental Politics. Firstly, research on international environmental regimes is focused on the negotiation of such regimes by sovereign states, the role of international environmental law and institutions in ensuring state

compliance and the effectiveness of such regimes in dealing with the environmental problems they seek to address. Secondly, research on the political economy of international environmental problems revolves around the themes of environmental impacts of a globalizing world economy, capitalism and multinational corporations. This research also questions the concept of sustainable development and the North/South dimension of most international environmental challenges. The field of Global Environmental Politics is constantly expanding, as is evidenced by the recent publication of many general overviews of this sub-discipline (Chasek, 2000, 2001; Kanie *et alia*, 2004; Dauvergne, 2005; Betsill *et alia*, 2006; Chasek *et alia*, 2006, 2010; Speth & Haas, 2006; Desombre, 2007; Okereke, 2007; Thai *et alia*, 2007; Weiss, 2007; Birnie *et alia*, 2009; Mitchell, 2010).

The focus of this dissertation is on 'the mother of all environmental challenges', climate change. By exploring recent developments in the global regime on climate change, in particular the negotiation of a new international treaty for the period after 2012, this dissertation does not stray far from the core of the Global Environmental Politics literature. The focus is firmly on the diplomatic interactions between the main governmental actors in the UNFCCC negotiations, the US, China and the EU. This dissertation also draws heavily on the literature on the political economy of international environmental problems, which is instrumental in highlighting the importance of the domestic political economy of state actors – and the domestic energy structures in particular – for explaining their diplomatic actions on climate change. Much has been published on the diplomacy around the UNFCCC and the Kyoto Protocol<sup>12</sup>, the

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<sup>12</sup> See Holtsmark & Hagem, 1998; Burniaux & O'Brien 1999; Grubb, 1993; Torvanger, 1998; Grubb *et alia*, 1999; Morlot, 1998, 1999; Oberthuer & Ott, 1999; Torvanger & Skodvin, 1999; Grubb *et alia*, 1999, 2001; Schroeder, 2001; Victor, 2001; Baumert, 2002; Grubb, 2004; Korppoo

environmental and climate policies of the EU<sup>13</sup>, the EU's energy policies (Haghighi, 2007; Buchan, 2009; Youngs, 2009), American policies on climate change and clean energy (Vig & Faure, 2004; Niblett, 2010; Vig & Kraft, 2010) and legal and compliance issues in the climate change regime<sup>14</sup>.

This dissertation is different, compared to the above-mentioned authors, because of its theoretical framework: Constructivism. Rather than viewing norms as “[reflecting] a hegemon’s national interests or domestic values”, Constructivists hold that norms as social institutions result from “actor interactions, while these actors’ identities and interests in turn are defined by such social institutions” (Klotz, 1995, 19 -21). This focus on the intersubjective nature of social structure enables Constructivists to not only question how “norms and social understandings [are] influencing agents”, but how the causal arrow also flows in the other direction (Finnemore & Sikkink, 2001, 397). Katzenstein (1996, 21) conceptualizes norm emergence and diffusion as a never-ending back-and-forth political process that operates in a variety of ways: “spontaneously evolving, as social practice; consciously promoted, as political strategies to further specific interests; deliberately negotiated, as mechanism for conflict management; or as a combination, mixing these three types (Katzenstein, 1996, 21). These mechanisms of norm diffusion indicate that “[n]orms do not appear out of thin air, they are actively built by agents having strong notions about appropriate or desirable behaviour in their community” (Finnemore & Sikkink, 1998, 896). With regard to climate change, a wide

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*et alia*, 2006; Douma *et alia*, 2007; Clarke, 2008; Parker, 2008; Vasser, 2009; Busby, 2010, 103-150; Koh *et alia*, 2010; Young, 2010.

<sup>13</sup> See Johnson & Corcelle, 1995; Andersen & Liefferink, 1997; Barnes & Barnes, 1999; Grant *et alia*, 2000; Weale *et alia*, 2000; Zito, 2000; Burchell & Lightfoot, 2001; Wettestad, 2002; Wurzel, 2002; Andonova, 2004; Jordan & Liefferink, 2004; Jordan, 2005; Oberthuer & Gehring, 2006; Harris, 2007, 2009a, 2009b, 2009c; Knill & Liefferink, 2007; Skjærseth & Wettestad, 2008; Jordan, 2010; Oberthuer & Pallemmaerts, 2010.

<sup>14</sup> See Wettestad, 1999; Werksman, 1999; Dannenmaier & Cohen, 2000; Luterbacher & Sprinz, 2001; Doyle & Luck, 2004; Axelrod *et alia*, 2011.

range of actors – environmental and development NGOs, corporations like energy companies, carbon markets, states and international institutions – all attempt “to create the underlying rules of the game, to define what constitutes acceptable play, and to be able to get other actors to commit themselves to those rules” (Adler, 1997, 336). For example, policy-makers are presented with two very different ways of understanding the issue of mitigation. On the one hand, environmentalists and climate scientists present climate change as an urgent threat that requires immediate emission reductions in line with the Contraction and Convergence approach, as outlined earlier. However, “new norms [...] emerge in a highly contested normative space where they must compete with other norms and perceptions of interest” (Finnemore & Sikkink, 1998, 897). Not surprisingly, energy companies, which rely on fossil fuels, question this sense of urgency, emphasize the high costs of transitioning to a low-carbon economy and promote the benefits of a domestic supply of fossil fuel in terms of improved energy security. Both sides of the argument engage in persuasive communication by using appropriate frames in order to change the intersubjective understanding of the ‘proper’ political response to climate change (Cass, 2005, 40).

Constructivism as a theoretical approach has taken International Relations theory by storm since the early 1990s, when the sudden end of the Cold War called into question the explanatory powers of Neorealism and Neoliberal Institutionalism. As indicated, Constructivism quickly established itself as a leading approach in the study of international politics by relying more on insights from sociology than on economics, (Onuf, 1989; Kratochwil, 1989; Sikkink, 1991, 2004; Ruggie, 1983, 1993, 1998a; Lapid & Kratochwil, 1996; Kubalkova *et alia*, 1998; Wendt, 1992, 1994, 1999). The research agenda of constructivists has focused on those areas where other dominant International Relations theories, and Realism in particular, dominated. Constructivists

have pursued a two-prong strategy for making their mark in debates within the International Relations discipline. First of all, Constructivists made “a conscious attempt to make [their] case to the most skeptical of audiences – the realists in security studies” (Finnemore & Sikkink, 2001, 396) by demonstrating the value-added of their focus on norms, identity, security communities and strategic cultures (Katzenstein, 1996; Price, 1997; Adler & Barnett, 1998; Hopf, 1998, 2005; Hemmer & Katzenstein, 2002; Wheeler, 2002; Finnemore, 1996, 2004; Zehfuss, 2001, 2002; Legro, 1996, 1997, 2005; Meyer, 2006; Pouliot, 2006, 2010). For example, Price and Tannenwald (1996, 115) describe how “patterns of non-use of [chemical and nuclear] weapons cannot be fully understood without taking into account the development of prohibitory norms that shaped these weapons as unacceptable ‘weapons of mass destruction’”. Secondly, the research agenda of Constructivists sought to demonstrate the power of norms “which could not be easily reduced to interests of powerful states” in empirical studies that spanned a variety of areas, including human rights, gender and racial equality, science policy, transnational advocacy networks and the laws of war (Finnemore, 1993, 1996; Klotz, 1995; Finnemore & Sikkink, 1998, Keck & Sikkink, 1998; Risse, Ropp & Sikkink, 1999; Crawford, 2002; Sikkink, 2004). This second literature highlights in particular how ‘principled’ transnational advocacy networks “use the power of their information, ideas and strategies to alter the information and value contexts within which states make policies”, mainly through “the construction of cognitive frames” (Keck & Sikkink, 1998, 16-17).

This first research clearly tried to establish that ‘norms matter’. This led Constructivist scholars to concentrate on traditional areas of research in International Relations Theory. As a result, security issues and human rights, which were considered of little importance in an anarchical system dominated by sovereign states dominate the research agenda. Constructivist scholars did not focus much of their attention on the

emergence of global environmental norms, even though the emergence of domestic environmental norms – due to the often trans-boundary nature of environmental problems – has a distinctly international origin (Schreurs & Economy, 1997). The 1972 United Nations Conference on the Human Environment in Stockholm is widely credited as “the emergence of a comprehensive ‘green’ society of states” (Epstein, 2006, 42) by establishing a whole host of environmental initiatives, treaties, national environment ministries and international institutions. This thesis is driven by the conviction that – while the Constructivist research agenda has surprisingly neglected this obvious case of global environmental governance to demonstrate that ‘norms matter’ – the Constructivist approach to the study of international politics has developed a powerful conceptual apparatus to help us understand the ongoing dynamics of global negotiations on climate change. Specifically, the Constructivist research on norms, norm leaders, norm diffusion through a socialization process, and the role of international law and international institutions to promote environmental norms, can all shed new light on the outcomes of diplomatic exchanges on climate change. By applying these Constructivist concepts, this dissertation aims to contribute to the wider debate about how international political actors develop global normative frameworks and in particular how a global governance of the atmosphere as a global commons can emerge.

Before proceeding to the constructivist research questions that animate this dissertation, I highlight the work on environmental issues that some Constructivist scholars have already conducted. Their research focused mostly on (transnational) environmental advocacy networks (Wapner, 1996; Keck & Sikkink, 1998; Bernstein & Cashore, 1999, 2007, Skodvin, 2000a, 2000b; Cashore *et alia*, 2007; Bernstein & Hannah, 2008). This research demonstrates that much activity in global environmental politics has moved “beyond the state” with civil society organizations such as transnational NGOs and

epistemic communities framing issues, setting agendas, and mobilizing publics, with state actors “only reacting to political changes fomented in an increasingly transnational civil society” (Finnemore & Sikkink, 2001, 400). Bernstein (2001) has pioneered a Constructivist approach by exploring the emergence of a ‘norm complex’ centered around the notion of sustainable development, which aimed to find a compromise between the need to protect the environment, while promoting economic development, what Bernstein describes as the notion of “liberal environmentalism”. Referring to Bernstein, Park (2009, 103) situates the concept of liberal environmentalism within “a much broader norm-complex based on state sovereignty, the shifting of the political economy from Keynesian to Neoliberalism, and the promotion of environmental management approaches”.

Bernstein’s focus on the ‘big picture’ evolution of sustainable development over a thirty-year period led him to use Constructivism to explore more specific issues in global environmental politics, e.g. how international normative pressures led to changes in Canadian forestry policy and climate change (Bernstein, 2002; Cashore *et alia*, 2007). In the last five years, other scholars have used the Constructivist approach to develop our understanding of global environmental politics. Hirata (2004) and Blok (2008) use Constructivism to explain the Japanese refusal to comply with a global norm that bans commercial whaling. Epstein (2006) provides a Constructivist account of a specific issue area, namely how specific discourses about endangered species such as whales still frame the debates in the United Nations, for example on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Palmujoki (2009) explores the evolution of global norms that govern the production of biofuels. Nagtzaam (2009) develops a Constructivist analysis of the normative evolution of distinct international environmental treaties in diverse policy areas such as commercial whaling,

logging and the protection of Antarctica. By focusing specifically on the recent negotiations on global norms on climate change, this dissertation will build on and contribute to this recent research which applies Constructivist concepts to topics related to global environmental governance.

This literature review addresses five major theoretical themes that animate debates among Constructivist scholars and those critical of the Constructivist research agenda. The first theme goes back to the longstanding divide in International Relations Theory between Rationalist and Constructivist approaches and situates this work within the broader remit of International Relations and political science more generally. The second theoretical theme focuses on the question of the EU's role as a 'norm leader', linking the constructivist literature on norm diffusion to the literatures on political leadership and the EU as an international actor. Thirdly, the literature on the North/South dynamics of global environmental politics is explored, focusing in particular on the salience of the principle of Common But Differentiated Responsibilities (CBDR) in climate change negotiations. A fourth theoretical theme considers the Constructivist literature on the importance of domestic structures as an explanatory variable why specific norms exert influence in some jurisdictions but not others. A last theme considers the role of China as an international actor.

## **II.2. Moving beyond the Rationalism vs. Constructivism debate in International Relations Theory: Reviewing the Conventional Constructivists' research on norms.**

One longstanding division within the International Relations discipline is focused around the question of what motivates the behaviour of actors in international politics.

Constructivists have criticized how debates in International Relations have been dominated by exchanges between Neorealism and Neoliberal Institutionalism. Both of these theories share a conceptualisation of international political actors as “each seeking to realize as much as possible in individual preferences but collectively confronting the fact that not everyone can have everything desired”, even though such a consequential conceptualisation of actors’ behaviour “is hard to justify from historical observations” (March & Olsen, 1998, 956-958). As an alternative, Constructivists have drawn our attention to the centrality of identity, culture and norms in international politics by reviving some of the concepts of older International Relations approaches such as those used in the English School and its ‘society of states’ (Bull, 1977) and importing insights from sociology such as Giddens’ (1986) structuration theory and the notion of the intersubjective nature of social relations. In doing so, Constructivism called into question “the convergence around neo-utilitarian precepts and premises” which rendered such ideational factors “in strictly instrumental terms, useful or not to self-regarding individuals (units) in the pursuit of typically material interests [...]” (Ruggie, 1998b, 855). The main criticism of these mainstream approaches is their assumption that “[s]tates and the system of states simply *are*: endowed with the ontological status of being, but not of becoming [...] [emphasis in original]” (Ruggie, 1998b, 863). By treating the identities and interests of states as “exogenous and given (in contrast to being treated as endogenous and socially constructed)” (Ruggie, 1998b, 862), the explanatory powers of Neorealism and Neoliberal Institutionalism have been particularly weakened in explaining transformations in international politics. Rejecting their approach of “specifying *a priori* roles based on theoretical presuppositions and then testing for those specified roles”, the focus on the endogenous nature of identities and interests leads constructivists to open up – as Checkel (2003, 326) put it – “the black box of interest and identity formation”.

Drawing on Giddens' (1986) structuration theory, which charts a middle course in debates between objectivism/subjectivism and agency/structure in social theory, Constructivism added the notion of "an irreducibly intersubjective dimension of human action" (Ruggie, 1998b, 856). This notion of intersubjectivity also goes back to Giddens' work on the duality of social structure, which is considered to be "at once constraining social action but also being (re)created and, therefore, potentially transformed by it" (Ruggie, 1998b, 862). For Giddens (1986, 25), structure is not defined as something that is entirely extrinsic to individual actors, but rather as "rules and resources recursively implicated in social reproduction; institutionalized features of social systems have structural properties in the sense that relationships are stabilized across time and space". Translated to the discipline of IR, this means that Constructivists treat international political structures as social structures, "made up of socially knowledgeable and discursively competent actors who are subject to constraints that are in part material, in part institutional" (Ruggie, 1998b, 879; Johnston, 2001).

It is important to remind ourselves that Constructivism is not a theory of IR, but rather "a theoretically informed approach to the study of International Relations", which is "inductive in orientation" and whose concepts are geared towards "[interpreting] the meaning and significance that actors ascribe to the collective situation in which they find themselves" (Ruggie, 1998b, 879-880). Hopf (1998, 196) adds that "if [Constructivism] is a theory, it is a theory of process, not substantive outcome". What Constructivists have in common are underlying conceptions of how the social and political world works, based on two assumptions: "(1) the environment in which agents/states take action is social as well as material; and (2) this setting can provide agents/states with understandings of their interests (it can "constitute" them)" (Checkel, 2003, 324-325). These two core assumptions and their emphasis on the *social* nature of international politics lead

Constructivists to employ “a model of human and state behaviour where rule-governed action and logics of appropriateness prevail. Such logics involve reasoning by analogy and metaphor and are not about ends and means” (Checkel, 1998, 326).<sup>15</sup> There is agreement among Constructivist scholars on such “theoretical fundamentals” (Hopf, 1998, 182). However, Constructivism is also a ‘big tent’, bringing together many variations of this approach. Building on the classification of the different forms of Constructivism by Hopf (1998), Ruggie (1998a) and Checkel (2004), I agree with their presentation of the different forms of Constructivism being located on a continuum between two different variants, Conventional and Postmodernist Constructivism. On one side of the spectrum, Conventional Constructivism is mainly focused on the role of norms as independent variables “These scholars are positivist in epistemological orientation and strong advocates of bridge building among diverse theoretical perspectives” (Checkel, 2004, 230). On the other hand, Ruggie (1998, 35) characterizes Postmodernist Constructivism as “a decisive epistemic break with the precepts and practices of modernism”, eschewing positivist methodologies. Their units of analysis are the discursive practices that structure international politics. Methods such as discourse analysis are used to explore the power structures that are inherent in the language employed in international politics.

The research project of this dissertation is closely related to Conventional Constructivism and the work of scholars such as Checkel, Ruggie, Katzenstein, Finnemore, Sikkink, Adler, Legro, Barnett and Pouliot cited earlier in the chapter. First of all, agency plays a large role in the research that addresses the ability of and the motivations behind the behaviour of actors such as the EU and China in discussions about a global approach to

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<sup>15</sup> This is a departure from the “individualist ontology” and its micro-economic assumptions about utility maximization (i.e. a logic of consequences) that underpin both Neorealist and Neoliberal Institutional conceptualisations of human and state actions (Wendt, 1993, 392-393).

climate change. While equally valid, less attention is focused on how specific discursive structure around 'sustainable development', 'ecological modernization' or the discursive shift from 'nature' to 'environment' help structure the politics of climate change (see Dryzek, 2005; Epstein, 2006) or how the construction of boundaries of inside/outside, domestic/foreign, civilized/barbaric and the practice of 'othering' or 'securitisation' might shape policies on climate change (Campbell, 1998; Buzan *et alia*, 1998). Secondly, most of the substantive chapters' research questions ask why a range of factors "produced an outcome that is historically *so* and not *otherwise* [emphasis in original]" (Ruggie, 1998b, 869). In line with the work of Conventional Constructivists, this dissertation is committed to developing International Relations theory as an integral part of social *science* "albeit one more plural and more social than that espoused in mainstream theories, while recognizing that its insights will be temporary and unstable" (Ruggie, 1998b, 881; Finnemore & Sikkink, 2001, 394). A Conventional Constructivist understanding of causality does not see causes as brute facts deterministically leading to specific outcomes across space and time. Rather, Conventional Constructivists emphasise the constitutive character of norms and conceptualises causes rather as "reasons for actions", because "people consciously and often rationally do things for reasons that are socially constituted by their collective interpretations of the external world and the rules they act upon [...]" (Adler, 1997, 330; Checkel, 1998, 326). To conclude this point, Conventional Constructivists do not claim to 'explain' political phenomena *in general*: Rather, their ambition is to understand –in Weberian terms *Verstehen* – how "dynamic normative and epistemic interpretations of the material world" shape the actions of political actors (Adler, 1997, 322).<sup>16</sup>

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<sup>16</sup> See the Research Methods Appendix (Appendix III) for an elaboration of the methodological implications of this epistemological position.

One of the main “reasons for actions”, identified by Conventional Constructivists in particular, are norms, which they have conceptualised as an variable that “intervenes between underlying power distributions and outcomes” (Checkel, 1998, 329).<sup>17</sup> A widely accepted definition of norms is provided by Katzenstein (1996, 54), who defines norms as “collective expectations about proper behavior for a given identity”. Norms are different from the more general concept of ideas in that “the prescriptive (or evaluative) quality of ‘oughtness’” of norms “have behavioural implications” (Finnemore, 1996, 22; Finnemore and Sikkink, 1998, 891). Constructivists have identified two types of rules that constrain the behaviour of actors in international politics, namely constitutive and regulative norms. Much of the early work of Constructivists has focused on constitutive rules, defined as “a set of practices that make up a particular class of organized social activity – that is to say, they specify *what counts as* that activity” (Ruggie, 1998b, 871). By importing modern economic theory into IR, mainstream theories take the existence of e.g. the international state system for granted, failing to address its origins. The role of constitutive rules such as sovereignty, self-determination, statehood or anarchy is to “generate expectation about the proper portfolio of identities for a given context”, in this case international politics. For example, Eckersley (2004) and Barry and Eckersley (2005) have explored how transnational environmental problems have reconfigured constitutive rules such as sovereignty and ‘greened’ the state. Regulative norms are intended to “prescribe or proscribe (‘regulate’) behaviors for already constituted identities” (Jepperson, Wendt & Katzenstein, 1996, 54). Put differently, regulative norms “are intended to have specific causal effects”, making states follow certain rules. This dissertation is particularly concerned with the latter, namely how emerging global norms over time “order and constrain the behaviour” of state actors in the area of climate

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<sup>17</sup> Other core research topics for Constructivists include identities, culture, security communities.

change (Finnemore & Sikkink, 1998, 890). Such regulative norms take the form of “good states do X”, which establishes a relation between norms, identities and interests (Price & Tannenwald, 1996, 124).<sup>18</sup>

Such a regulative norm on climate change could refer to a multitude of climate-related norms that cover different areas, such as emerging norms with regard to the need to reduce deforestation or to supply adequate finance for adaptation in developing countries. This thesis investigates specifically a ‘norm on mitigation’ that imposes an obligation on states to reduce the emissions by their national economies. Environmentalists have advocated a mitigation norm that resembles the ‘Contraction and Convergence’ approach to mitigation, as developed by the Global Commons Institute (2009): Emissions of both developed and developing countries need to decline as soon as possible (i.e. contract), but the former need to peak and decline earlier than the latter, ultimately converging to an equal level of per capita emissions. This non-uniform applicability of a global mitigation norm with its differential treatment of industrialized and developing states is justified by referring to the historical responsibility of the industrialized states in the Global North for the increased greenhouse gas concentrations in the atmosphere, which are the direct result of more than 200 years of fossil-fuel consumption. This global mitigation norm, as exemplified by the Contraction and Convergence approach, expects industrialized states to start reducing their absolute emissions immediately given their higher per capita emissions levels than those of developing states. Last but not least, the more advanced regulatory, financial and technological capabilities to tackle emissions of industrialized states justifies this the

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<sup>18</sup> This conceptualisation of a regulative norm takes the view that “social norms take the generic form of “good people do (or do not do) X in situations A, B, C, ...” because “we typically do not consider a rule of conduct to be a social norm unless a shared moral assessment is attached to its observance or non-observance” (Fearon & Laitin, 1997, 25 quoted in Finnemore & Sikkink, 1998, 890).

expectation that they take the lead in reducing emissions, whereas developing states get more time to make the transition to a low-carbon economy.

Finnemore (1996, 158) argues that such regulative norms should be understood as shaping interests, and these interests in turn shape the actions of international actors with neither connection being determinative. Conventional Constructivists have debated these connections in depth, recognizing that some norms constrain the behaviour of states more than others. Jepperson, Wendt & Katzenstein (1996, 55) acknowledge that “the strength of the causal effects of norms varies [...] from mere discursive receptivity [...] through contested models [...] to reconstructed wisdom”. The challenge for Conventional Constructivists is to explain when the strength of a specific norm forces states into compliance with the norm. Tackling this very issue, Legro developed the concept of ‘norm robustness’. In order to establish which norms (of usually many competing norms) guided e.g. a foreign policy on climate change, Legro (1997, 33) warns against tautological explanations, which link the behaviour of a specific actor to a norm: “[A]voiding circular reasoning requires a notion of norm robustness that is independent of the effects to be explained”. Legro (1997, 34-35) assesses ‘norm robustness’ based on three criteria: Specificity refers to “how well the guidelines for restraints and use are defined and understood”. Or “do countries argue about what the restraints entail and how to implement them?”. Secondly, durability assesses a norm’s “long-standing legitimacy” and “how they weather challenges to their prohibitions”. Thirdly, “[c]oncurrence means how widely accepted the rules are in diplomatic discussions and treaties (that is, the degree of intersubjective agreement)”.

How can Legro’s work be applied to climate change? I argue that the global mitigation norms in question displays a low level of norm robustness, in particular due to different

interpretations in North and South of 'Common But Differentiated Responsibilities' (CBDR), which is a key principle in the basic international legal framework on climate change of the UNFCCC and the Kyoto Protocol.<sup>19</sup> All states recognize that climate change is a global problem requiring a common effort of all states. However, the distinction between the 'Global North' and 'Global South' with regard to the issue of mitigation remains very much politically contested in both North and South. Whereas the North insists that emerging economies in the South like China, India and Brazil should commit to limit their future emissions increases under a new climate treaty given their surge in emissions since the entry into force of the UNFCCC, the South – as organized in the G-77 plus China – continues to emphasize the greater responsibility of advanced industrialized states for their historical emissions.

The basic international legal framework on climate change, the UNFCCC and the Kyoto Protocol, recognizes to some extent the validity of the 'Contraction and Convergence' approach and questions of equity and historical responsibility, but its 'norm robustness' remains weak. The specificity of this norm is low, as questions remain about who should make the deepest cuts, when these cuts should be achieved, what baseline year should be used for emissions, how to best achieve emissions reductions and so on. As for the second criterion of durability, an emerging climate change norm on mitigation remains very much in the making, as the Kyoto Protocol only entered into force in 2005 and compliance of industrialized states with their Quantified Emission Limitation and Reduction Obligations has been poor. Moreover, the latest round of negotiations only started in 2007 with the approval of Bali Action Plan. Before that, the US – the largest emitter of greenhouse gases at the time – refused to ratify the Kyoto Protocol. Thirdly,

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<sup>19</sup> Chapter V discusses the CBDR principle in more detail.

diplomatic discussions have not made much progress in clarifying the meaning behind some of the basic principles in the UNFCCC, such as CBDR principle. Major divisions along a North/South divide characterize a low degree of concordance for a global norm on climate change. In summary, a global climate change norm on mitigation is still very much in the works, especially because the degree of norm robustness varies considerably among different actors, from outspoken hostility in the US, to claiming a leadership on climate change for the EU and a considerable dose of suspicion among developing and particularly emerging economies like China. Nonetheless, tackling climate change is no longer a minor environmental problem, but has in recent years become a pressing issue. The participation of almost 120 heads of state and government in the Copenhagen climate summit indicates the importance attached to this issue.

By focusing on this mitigation norm, this research addresses two shortcomings in the Conventional Constructivist research on norms. First of all, due to a selection bias in favour of 'successful' norms (e.g. anti-racism norms, human rights norms on the prohibition of torture), greater variation is advocated in the studies of norms in order to understand "why certain norms seem to be so influential and others are not" (Legro, 1997, 58). Exploring a weak mitigation norm such as the Contraction and Convergence approach can contribute to filling a gap in the Constructivist research agenda. This thesis will analyse the link between a global mitigation norm and the political-economic context in which environmental norms operate. A second selection bias identified by Kowert and Legro (1996, 485) is the research focus among Conventional Constructivists on progressive norms in international politics that seek to overcome the possible negative implications of an international system based on sovereign states: anti-racism and human rights, laws of armed conflict, decolonisation, prohibitions on the use of

specific military technologies, such as nuclear and chemical weapons, cluster bombs, land mines and so on. So-called 'bad norms' such as the notion of military superiority, economic exploitation or unilateralism remain understudied. An exploration of an emerging 'good norm' such as a norm on climate change mitigation could generate interesting theoretical findings, because this norm has to compete at both the international and domestic level with 'bad norms', which emphasize energy security, economic growth and non-intervention in domestic affairs. These practices often receive higher levels of political support in a given domestic political context. The unresolved debate about 'the economy vs. the environment' as well as geo-political tensions around energy security could hinder the acceptance of a norm that obliges states to curb emissions as soon as possible. While this dissertation focuses on a 'good' mitigation norm, the following chapters explore in detail how other 'bad' considerations – in terms of their negative impact on the effectiveness of environmental protection – about growing the economy and energy security have also influenced domestic political debates in the EU and China.

### **II.3. Where do norms come from? Power, the process of norm diffusion and the role of 'norm leaders'**

The Conventional Constructivist research programme has sought to demonstrate that 'norms matter', which requires demonstrating that norms are more than *post-hoc* justifications for the interests of the most powerful actors. For example, Ikenberry and Kupchan (1990, 283) link the emergence of new norms to a socialisation process, whereby the political elites of secondary states "buy into and internalize norms that are articulated by the hegemon and therefore pursue policies consistent with the hegemon's notion of international order". Constructivists need to tackle this line of argument and

demonstrate that e.g. a global mitigation norm would not just provide cover for the economic or strategic interests of the world's most powerful state actors.

Politics is about power, and political scientists develop our understanding of how power is structured through processes, ideas, and institutions and the implications of the power dynamics. Conventional Constructivists have researched in detail the origins of norms and identified a wide range of agents in international politics that have the *power* to promote norms. Mainstream International Relations theories have mainly emphasized material capabilities – be they military or economic – to explain (changes in) the distribution of power and defined power as “the production of any and all effects and thus as nearly synonymous with causality” (Barnett & Duvall, 2005, 40-42). In contrast, Constructivists have developed their own understanding of power that is more in line with their ontological assumptions around intersubjectivity and the role of social constructions in our understanding of ‘reality’. Adler (1997, 336) provides a Constructivist definition of power:

Power, in short, means not only the resources required to impose one's view on others, but also the authority to determine the shared meanings that constitute the identities, interests and practices of states, as well as the conditions that confer, defer or deny access to ‘goods’ and benefits.

Of particular importance for Constructivists is the power that comes with authority, namely “the ability to create the underlying rules of the game, to define what constitutes acceptable play, and to be able to get other actors to commit themselves to those rules because they are now part of their self-understanding is perhaps the most subtle and most effective form of power” (Adler, 1997, 336). This conceptualisation of power is related to Barnett and Duvall's (2005, 52-55) notion of “Structural Power”, which is concerned with “the structures – or, more precisely, the co-constitutive internal relations of structural positions – that define what kinds of social beings actors are” by shaping “their self-understanding and subjective interests”.

This open-ended definition of power allows for a broader conceptualisation of powerful agents in international politics. This explains the broad interest among Constructivists to also study actors 'beyond the state'. This research demonstrates that international politics has moved – to a degree – “beyond the state” with civil society organizations and transnational corporations framing issues, setting agendas, and mobilizing publics, with state actors “only reacting to political changes fomented in an increasingly transnational civil society” (Finnemore & Sikkink, 2001, 400). Haas (1989, 1992, 2004) has also demonstrated how epistemic communities<sup>20</sup> have become a crucial help for policy-makers to navigate the growing technical uncertainties and complexities of global policy issues. Haas (1992, 3) defines an epistemic community as “a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area”. Issues of environmental pollution and the protection of endangered species are a case in point, where scientific communities are usually at the forefront in identifying environmental challenges. Other actors in international politics that lie beyond the state are the transnational advocacy networks (Keck & Sikkink, 1998). Sikkink and Finnemore (1998, 896) have called such networks ‘norm entrepreneurs’, which are defined as “agents having strong notions about appropriate or desirable behaviour in their community”. Such networks of norm entrepreneurs have been at the forefront of many international debates about human rights, women’s rights, indigenous people, the environment, nuclear disarmament, North/South debates, and so on. These non-governmental actors play a crucial role in agenda-setting and monitoring compliance (see also Busby, 2010).

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<sup>20</sup> With regard to climate change, the IPCC and its active role in informing policy-makers about the range of options available are a perfect illustration of such an epistemic community in action.

However, international – in the sense of intergovernmental – environmental cooperation continues to occupy a central role in the negotiations of legally binding treaties with global reach. While “there should be few illusions about what is achievable solely at the international level”, Vogler (2005b, 238) emphasizes how international environmental governance fulfils four important functions: norm creation, dissemination of scientific knowledge, capacity building and the provision of multilateral regulatory frameworks. Conventional Constructivists have also recognized the important role of intergovernmental negotiations and organisations in the diffusion of norms. Finnemore and Sikkink (1998, 895) developed the concept of a norm’s ‘life cycle’, with a first stage of norm emergence, whereby norm entrepreneurs persuade states that supporting a specific norm is in their best interest. This is followed by a second stage of gradual acceptance by a “critical mass of states” up to a ‘tipping point’ resulting in a norm cascade, “characterised more [than the first stage of norm emergence] by a dynamic imitation as the norm leaders attempt to socialize other states to become norm followers”. In a third stage, the norm becomes internalised by domestic policy-makers.<sup>21</sup> From this brief description, it is clear that state actors – in particular the diplomacy of ‘norm leaders’ – play an important role after the first stage, in pushing for the wider acceptance of a specific norm. Finnemore and Sikkink (1998, 901) point out that “[i]t also matters which states adopt the norm”: Some states should be considered as ‘critical’, defined as “those without which the achievement of the substantive norm goal is compromised”, while others are less critical. However, by focusing their attention on actors beyond the state such as environmental NGOs or epistemic communities, Conventional Constructivists have paid little attention to the role of such state actors and their diplomacy play. Finnemore and Sikkink (1998, 895) define ‘norm leaders’ as states,

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<sup>21</sup> A more elaborate 5-stage model was developed by Risse and Sikkink (1999, 22-29) with respect to the diffusion of human rights norms.

which have already internalised a given norm and “attempt to socialize other states to become norm followers”. This thesis aims to fill a gap in the Conventional Constructivist literature, which has been overly focused on actors ‘beyond the state’, by further developing the concept of norm leader. One of the ways to do so is by linking this concept of ‘norm leaders’ to the already existing literature on political leadership (Young, 1991; Underdal, 1994; Malnes, 1995; Andresen & Agrawala, 2002; Elgstrom, 2007a). Political leadership has been widely considered to be a critical factor for progress in global environmental regimes: The requirement to decide by unanimity, and concerns about the impact of ambitious environmental standards on economic competitiveness, necessitate leadership to avoid lowest common denominator solutions for dealing with environmental challenges. For example, Grubb and Gupta (2000), Skodvin and Andresen (2006), Schreurs and Tiberghien (2007) and Vogler and Stephan (2007) already used the literature on leadership to assess the EU’s leadership role in the negotiations on the Kyoto Protocol.

My theoretical framework reserves a role for state actors, but the inter-state dynamics remains underspecified. Concepts such as ‘norm cascades’, ‘tipping point’, ‘spiral model’ give the impression of an outside-in explanation: Once norm entrepreneurs have created the necessary outside pressure on state actors, some states will assume a leadership role and socialize other states into an internalisation of the norm. We are offered few clues to understand the factors that influence the effectiveness of such norm leaders or the possible strategies of resistance by the potential norm followers. One of the theoretical drives behind this dissertation is to put more empirical ‘meat’ to the theoretical ‘bones’ of Conventional Constructivists and their work on norm diffusion by focusing in particular on the diplomatic interactions between governmental actors like the EU and China over global environmental norms.

This thesis explores how specific mechanisms for norm diffusion, as identified by Constructivist scholars, help the EU in its promotion of a global mitigation norm. First of all, Constructivists have identified how successful norm entrepreneurs frame “normative ideas in such a way that they resonate with relevant audiences” (Nagtzaam, 2009, 74). One framing strategy that can help norm entrepreneurs persuade potential norm followers is “to frame their issues in ways that make persuasive connections between existing norms and emergent norms” (Finnemore & Sikkink, 1998, 908). Given the prevalent political discourse of the need to choose between the environment or the economy, a norm leader like the EU can offer alternative frames that enables policy-makers elsewhere to understand this as a false dichotomy by pointing out how – for example – transitioning to a low-carbon energy can enhance economic development and energy security.

Using the right frames can also help norm entrepreneurs as well as norm leaders to promote learning, which “increases the capacity and motivation to understand competing alternatives to a currently entertained inference and becomes a creative process through which alternatives and preferences or ‘interests’ are generated” (Adler, 1997, 340). Particularly when policy-makers are faced with complex problems, where the ‘right’ course of action is not obvious, Constructivists demonstrated how epistemic communities can provide knowledge and arguments, which “can influence state interests either by directly identifying them for decision-makers or by illuminating the salient dimensions of an issue [...]” (Haas, 1992, 4). Constructivist research by Checkel (1999, 88-91) has identified such learning as an important diffusion mechanism, but showed how domestic structures influence the likelihood of such learning. In liberal state structures, norm diffusion works through a ‘bottom-up’ process, in particular the ‘naming-

and-shaming' activities of non-state actors. Due to "amount of friction generated by politics" in liberal states, learning is less likely to occur (Checkel, 1999, 89). On the other extreme – in domestic "state-above-society" structures with a highly centralized decision-making – social learning is more likely to occur. With regard to the EU's efforts to promote a global mitigation norm in a one-party-state like China, I anticipate that social learning can play an important role, provided the EU finds the correct frames to persuade Chinese leaders.

#### **II.4. What kind of global actor is the European Union? The European Union as a Green Normative Power?**

The very existence of the EU has puzzled International Relations theorists for decades, as is reflected in the wide range of approaches under the umbrella of European integration theory (for an overview, see Wiener & Diez, 2004). Approaches range from Federalism (Burgess, 2000; Burgess & Volland, 2006), Functionalism (Haas, 1958), Liberal Intergovernmentalism (Moravcsik, 1998), multi-level governance approaches (Hooghe & Marks, 2001; Kohler-Koch, 2003), neo-institutionalism (Kerremans, 1996), International Political Economy (Jones & Verdun, 2005) to Constructivism (Jørgensen, 1997; Christiansen *et alia*, 2001; Jørgensen *et alia*, 2006).

The end of the Cold War led to greater efforts to formulate a Common Foreign and Security Policy for the EU, whereby Member States agreed to reserve a role for the EU in the area of high politics. As this 'pillar' of EU integration been successively strengthened in each of the new major Treaties, one of the most active literatures has focused on the common approach of the EU and its Member States to foreign policy and

the EU as a global actor.<sup>22</sup> Much analysis has been dedicated to the EU's efforts to build a Common Foreign and Security Policy.<sup>23</sup> The development of the EU's autonomous military capabilities through the European Security and Defence Policy led scholars to research the implications for transatlantic relations.<sup>24</sup> Another major literature addresses the why and how of EU enlargement<sup>25</sup>, its relations with 'wider Europe' through the European Neighbourhood Policy and its attempts at stabilizing the Balkans.<sup>26</sup> While the effectiveness of the EU's foray in security and defence may be in doubt, the EU's unified approach to external trade is beyond doubt and has also been covered extensively.<sup>27</sup> The impact of EU foreign policy is being felt around the world in other policy areas, especially development policy.<sup>28</sup> Scholars have also demonstrated that the EU's internal policies such as its Internal Market, the EURO, the Common Agricultural Policy and the EU's coordination efforts in the area of Justice and Home Affairs as well as environmental policies (e.g. the EU's REACH regulation on chemicals) have repercussions that extend far beyond the EU27 Member States.<sup>29</sup>

One of the main points of contention in scholarly debates concerns the "nature of the beast", as Risse-Kappen (1996) and Bretherton and Vogler (2006, 37) aptly put it. What kind of power is the EU? Can the EU "remain a 'civilian' power with 'normative/civilizing' "

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<sup>22</sup> See Schimmelfennig, 2003; Carlsnaes *et alia*, 2004; Tonra, 2004; Elgstrom, 2005; Bretherton & Vogler, 2006; Elgstrom & Smith, 2006; Lucarelli & Manners, 2006; Meyer, 2006; Casarini & Musu, 2007; Orbie, 2008; Lucarelli & Fioramonti, 2010.

<sup>23</sup> See Smith, 2004; Anderson, 2008; Keukeleire & MacNaughtan, 2008; Smith, 2008; Gross, 2009; Bindi, 2010.

<sup>24</sup> See Gardner, 2004; Parsons & Jabko, 2005; Merlingen & Ostrauskaite, 2006; Michta, 2006; Ojanen, 2006; Parsi, 2006.

<sup>25</sup> See Jenkins & Smith, 2003; Cameron, 2004; Kazierkiewicz, 2004; Schimmelfennig & Sedelmeier, 2005; Sedelmeier, 2005; Grabbe, 2006; Kellerman, 2006; O'Brennan, 2006; Sadurski *et alia*, 2006; Sjursen, 2006b; Scott, 2006; Zielonka, 2002, 2006; Tatham, 2009)

<sup>26</sup> See Blockmans, 2007; Varwick & Lang, 2007; Weber *et alia*, 2007; Dekker, 2008; Kavalski, 2008.

<sup>27</sup> See Meunier, 2005; Meunier & Nicolaidis, 2006.

<sup>28</sup> See Holland, 2002; Babarinde & Faber, 2005; Carbone, 2007; Hout, 2007; Mold, 2007.

<sup>29</sup> See Orbie, 2008; Balzacq, 2009; Lavenex & Schimmelfennig, 2009.

influence on the foreign policies of its member states and on the practices of International Relations more generally defined” or does the recent acquisition of military means for the EU push the EU towards more traditional ‘Great Power’ politics (Smith, 2006, 322-323)? There is a long-running debate among observers of EU foreign policy about whether the combination of intergovernmental and supranational features of the EU has led to a type of foreign policy that can be considered as different from ‘normal’ state behaviour. Much of the literature refers back to an early contribution by Duchene (1972, 43), who saw a role for Europe – the European Economic Community at the time – in easing world tensions during the Cold War by pursuing its role as “the first of the world’s civilian centres of power”. Duchene’s proposal was informed by two ideas: It was simply unfeasible for Europe to pursue the ambition of becoming a major military power. And secondly, “shaping the international *milieu* often in areas which at first sight have little to do with security [emphasis in original]” seemed according to Duchene a better strategy to secure Europe’s security and welfare. As the Cold War warmed up at the start of the 1980s, Bull (1982, 164) very much doubted the validity of an EU, who would try to protect its own interests through civilian means. Instead, he suggested that European leaders start discussions on “their common and distinct strategic interests, and in relation to these discuss strategic plans and doctrines, defence budgets, arms and armed forces”. This perspective dominated much of the discussion, even after the end of the Cold War. Hill’s (1993) widely-cited article on the “capability-expectations gap” illustrates this. The EU’s inability to stop the violence in Bosnia and Kosovo and its reliance on the US to help provide security around its own borders perpetuated that debate until the turn of the century (Dover, 2005). The events of September 11, 2001 and the deep disagreements between (most) EU Member states about the wisdom and legality of the American invasion of Iraq opened the possibility to revisit earlier conceptualisations of the EU as a more civilian form of power (Hill, 2004).

Manners (2002) suggested moving away from a focus on the EU's capabilities and instead conceptualize the EU as a 'Normative Power'. Manners (2002, 236) views the EU as "an ideological power" with an ability to shape "what passes for 'normal' in world politics". In a post 9/11 context dominated by American military intervention in Iraq and Afghanistan, his article on Normative Power Europe struck a chord among scholars of EU foreign policy and started a debate about its accuracy and its value-added in terms of better understanding the EU's role in international politics. Many have used this conceptualisation of the EU by either responding directly to Manners' argument or its critiques (Diez, 2005; Manners & Whitman, 2003; Manners, 2006a) or by developing their own concepts such as 'ethical power Europe' (Aggestam, 2008), 'cosmopolitan polity' (Oddvar Eriksen, 2006), 'normative empire' (Laidi, 2008), 'empire by example' (Zielonka, 2008) and 'structural foreign policy of the EU' (Keukeleire & MacNaughtan, 2008). The 'Normative Power Europe' concept has been applied in specific policy areas, such as human rights (Manners, 2002), development aid (Scheipers & Sicurelli, 2008), security issues (Manners, 2006b; 2008a), social norms (Riddervold, 2010) and the EU's external actions on global environmental issues (Burchell & Lightfoot, 2004; Lightfoot & Burchell, 2005; Scheipers & Sicurelli, 2007).

While many have recognized the value of the EU as a Normative Power, the concept has also attracted a number of critiques. First of all, Diez (2005) and Sjusen (2006a, 235) point out that the Normative Power concept closely resembles the near-consensual representation of the EU by European leaders as a force for good in the world. Moreover, the "notion of normative power is hardly novel and unique to the EU" and has also been used in relation to US foreign policy (Diez, 2005, 620) as well as other states like China, India and Russia (Tocci, 2008). Sjusen (2006a, 248) urges scholars, who

make use of the Normative Power concept, to develop more specific criteria to assess “if the EU’s putative pursuit of norms is legitimate”. Talk of the EU Normative Power can also be used to obfuscate the difference between interests and norms, as Schimmelfennig (2001, 48) has demonstrated by applying the notion of ‘rhetorical action’ – i.e. “the strategic use of norm-based arguments” – to the EU’s decision to enlarge to Eastern Europe. Arguing along similar lines, Busby (2007) applies the notion of strategic framing by advocates in the context of the US and Japan. This scepticism about our ability to distinguish clearly between interests and norms led Diez (2005, 635) to call for a high degree of self-reflexivity in the EU’s use of the Normative Power, as the EU’s foreign policy attempts to project particular norms abroad “held to be universally valid beyond the EU is starting to articulate a much less reflexive position”. Addressing the issue of how disentangle the EU’s pursuit of Normative Power from the EU’s interests, Falkner (2007, 520-521) does not reject the concept of Normative Power Europe, but suggests that “we need to situate the EU’s emerging identity in its historical context and connect the study of identity with that of interests [...]. Above all, we need to retain a critical perspective on any claim that power serves global interests and universal values”. For example, the EU’s self-proclaimed leadership role on climate change should not be taken at face value, “but the limitations of this role are closely connected with the political economy of energy production, manufacturing and consumption in Europe”. Nonetheless, the value of the Normative Power concept – unlike mainstream International Relations theories – is situated in its ability to offer “at least the theoretical possibility that references to norms can be something other than hypocritical” (Sjursen, 2004, 125).

While critical of the concept, Sjursen (2006a, 235) has welcomed this Normative Power debate “because it has brought the research agenda on European foreign policy a step

forward from the at times sterile discussion on whether the EU 'actually' has a foreign policy or not". Smith (2006, 323) also highlights that the literature on EU foreign policy has moved away from state-centric analyses focused on the preferences of Member States: "[I]ndeed, a key assumption of many contributions is that such choices and preferences are themselves reshaped by the process of co-operation in [European foreign policy]". For example, Bretherton and Vogler's (2006, 1) research on the 'actorness' of the EU grew out of a dissatisfaction of such state-centric approaches, which were considered to be "unable to fully capture the external impact of the EU". Rather than dwelling on legal and institutional questions of the EU's foreign policy, Bretherton and Vogler (2006, 17) use behavioural criteria to explore the EU as an 'actor', i.e. "an entity capable of formulating purposes and making decisions, and thus engaging in some form of purposive action". Vogler (2000, 2005a, 2007, 2008) has applied this concept in particular to the role that the EU plays in global environmental governance.

Concepts such 'Normative Power Europe' and the EU as an 'actor' have helped to move the research on EU foreign policy beyond studying "what the EU foreign policy system actually *does*, but also what it actually *achieves* in International Relations. Formulated differently: does it matter what the EU does? [emphasis in original]" (Keukeleire, 2009, 919-920; Sjursen, 2006c, 170). This is also one of the theoretical preoccupations of this dissertation, which explores the impact of the EU's foreign policy on the outside world and the variables that influence the ability of the EU to function effectively as a global actor. Several scholars point to the central importance of the EU actually complying with the norms it preaches in its foreign policy. Contradictions between high rhetoric about EU leadership and lacklustre action by the EU itself undercut the effectiveness of the EU's external action, particularly for the EU's effectiveness in promoting environmental norms. Lightfoot and Burchell (2005, 88-90) use the concept of Normative Power to

analyse the EU's leadership role at the 2002 World Summit on Sustainable Development. In their conclusion, the EU's 'policy coherence', defined as "coherence between its external commitment and its internal policies" is essential "to ensure that the EU's pursuit of norms is no longer weakened by its support of policies detrimental for other countries".<sup>30</sup> Kilian and Elgström (2010) use the term "credibility" rather than policy coherence, but they mean the same thing. In order for the EU to be successful as a leader,

the EU's external ambitions as a policy entrepreneur have to be matched by 'domestic' policies demonstrating that the Union does what it preaches. The EU therefore has to set good examples and create internal policies that are at the forefront of the combat against climate change, but also to actually implement these policy ideas (Kilian and Elgström, 2010, 259).

The literature on (the different types of) political leadership has also started addressing the importance of effective implementation as a prerequisite for effective leadership. As Parker and Karlsson (2010, 926-927) point out, the relationship between the credibility of the leadership of an actor like the EU and (a lack of) implementation on specific issues like e.g. climate change remains underdeveloped. In their research on the external perceptions of the EU, Lucarelli and Fioramonti (2010, 220-224) emphasize the danger of inconsistencies and double standards for the impact of EU foreign policy, in particular in its relations with developing countries. To improve the EU's image in world affairs, these scholars recommend that European policy-makers address firstly "the reciprocal coherence of various EU policies, but also their consistency with the fundamental values the EU claims to promote".

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<sup>30</sup> Policy coherence is different from other forms of coherence that have been emphasized in the literature. For the EU to be an effective global actor, Bretherton and Vogler (2006, 31-32) underscore the importance of coherence (i.e. "the level of internal coordination of EU policies") and consistency (i.e. the degree of congruence between the external policies of the Member States and of the EU"). The former is also referred to as horizontal coherence, the latter as vertical coherence. For example, Bretherton and Vogler (2000) explored how the EU's promotion of free trade can come into conflict with its promotion of environmental objectives due to a lack of (horizontal) coherence.

This focus on how external actors perceive the EU as an international actor has been identified as “a gap in the literature” (Lucarelli, 2007). One of the initial findings of an emergent literature on this topic is the identification of the EU “as a leader in issues of international morality” and that the EU is perceived as “a ‘leader for good’ focusing on ‘softer’ issues such as environmental protection, human rights and sustainable development” (Chaban, Elgström & Holland, 2006, 259). By using the concept of policy coherence, this thesis explores how the EU’s negotiation partners and environmentalists perceive the EU’s self-proclaimed leadership role on climate change at the multilateral level in the context of the UNFCCC. Negative perceptions of the EU’s policy coherence undermine the EU’s ability to promote a global mitigation norm vis-à-vis its negotiation partners, as evidenced during the negotiations during the 15<sup>th</sup> Conference of Parties in Copenhagen.

## **II.5. The importance of North/South dynamics in the multilateral negotiations on a new global climate treaty**

Within political science and International Relations theory, the sub-discipline of Global Environmental Politics is a recent phenomenon, as “[r]esearch on global environmental politics took off after the 1992 Rio Conference” (Dauvergne, 2005, 13). Neoliberal institutionalist theories have dominated the research on international environmental regimes (Krasner, 1983; Young, 1989, 1999, 2002, 2005; Keohane, Haas & Levy, 1993; Young *et alia*, 1996; Wettestad, 1999; Underdal & Young, 2004, Young *et alia*, 2008). The focus of their research has been on two main topics: the formation of international environmental regimes and issues of state compliance with international obligations. The pre-occupation with environmental diplomacy, Pareto-optimal results and environmental

pollution *sensu stricto* left other concerns in international environmental regimes under-explored. A clear Northern or Western – predominantly American – bias has dominated Global Environmental Politics as a sub-discipline. The preoccupation of the Global Environmental Politics with the efficient design and effectiveness of international environmental regimes reflects the priorities of American foreign policy in this area (e.g. Buchner & Carraro, 2005, Kroll & Shogren, 2008; Pittel & Rubbelke, 2010).

Scholars from the Global South have taken issue with this bias. In a chapter entitled “Why environmental politics looks different from the South”, Najam (2005, 111) argues the following:

[I]t is not only that the conditions of the North and the South are different (one is rich and the other poor), nor only that their interests are dissimilar (each has distinct sets of environmental priorities), but it is also that the very goal and purpose is different, when seen from the South, from what it seems to be for those viewing this politics from the North. For example, an analysis by Gupta and van der Zaag (2009, 22) on “The Politics of Water Science” clearly demonstrates a Northern bias in the research agenda due to “a very critical gap in knowledge between North and South and between issues that concern the North and those that concern the South”. Within water science, Gupta and van der Zaag (2009, 16-17) show that “nearly three times more scientific articles are published on the topic of water conflict than on water cooperation”, which can lead to the unintended effect that science becomes an obstacle to water cooperation. To start remedying this situation, these authors “make a strong plea to allow the South to create its own biases”.

One of leading concerns of the Global South is the equitable division of environmental resources between advanced industrialized and developing states. Vogler (2003, 36) identifies the issue of justice as a major concern for scholars of sustainable global

environmental governance “in the context of gross inequality between human individuals and communities and the distribution of benefits between generations”. Questions of fairness, equity or justice are issues that “[t]he utilitarian theoretical apparatus of both the neo-realists and the liberal institutionalists essentially denies [...] in the solution of collective action problems and the creation and maintenance of institutions” (Vogler, 2003, 31). Authors such as Okereke (2008, 18) have started drawing attention to the distributional functions of international environmental regimes “in terms of the more specific ways in which the remits of regimes enable them to serve as vehicles for exacerbating or correcting existing social and economic inequalities between nations”. So far, studies on global environmental regimes and global commons have not been pre-occupied with distributional questions. Constructivism, which is often represented as “an important corrective to the rationalistic and positivistic approaches to regimes” (Okereke, 2008, 185) has not yet engaged with ethical issues in regimes in-depth, which is unfortunate. In my view, a Constructivist theoretical framework can draw attention to how questions of fairness and an equitable distribution of access to the atmosphere, inform diplomatic negotiations on climate change.

This lack of attention to the equitable resolution of distributional issues is puzzling, because “virtually all the major discussions of global commons issues have occurred within the context of demands for developmental justice in North-South relations” (Vogler, 2005c, 60). This has been the case from the very beginning of international environmental negotiation in the early 1970s. Eckersley (2004, 224) points out how states from the Global South defend “the right to develop (autonomously and sustainably according to their own cultural frameworks and environment and development priorities) [...] in no less *moralistic* terms than the case for environmental protection advanced by environmental NGOs [emphasis in original]” by arguing that “the developed world has

achieved its relative affluence by exploiting the environment and fossil fuels [...]”. These North/South dynamics date back to the 1972 Stockholm Declaration on the Human Environment, where developing states successfully resisted attempts by industrialized states to treat environmental pollution in isolation from (unfair) socio-economic structures (Bernstein, 2001, 33). For example, preamble 4 of the Stockholm Declaration identified under-development as the main cause of environmental problems in developing countries. By linking the environment and economic development, “[d]eveloping countries have a shared interest in ensuring that environmental protection is not at the expense of what they perceive as the right to development” (Williams, 2005, 56). In the negotiations before the 1992 Rio Conference, Bernstein (2001, 93) identifies four principles guiding the strategy of the G-77, including: “Reduction in consumption of natural resources and environmental services in the North to give the South ‘environmental space’ for its development” (see also Parks & Roberts, 2008, 623). This was recognized explicitly in Principle 7 of the 1992 Rio Declaration:

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have *common but differentiated responsibilities*. The developed countries acknowledge the *responsibility* that they bear in the international pursuit to sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command [my emphasis].

The wording of this article strikes a balance between the emphasis of the South on “state sovereignty and an increased obligation for environmental protection, while the North wanted a more equal burden-sharing closer to the common responsibility approach of the Brundtland Commission” (Bernstein, 2001, 99). The 1992 UNFCCC was the first international environmental treaty, which unambiguously adopted the principle of Common But Differentiated Responsibilities (CBDR) as one of its guiding principles

(Stone, 2004, 279; Okereke, 2008, 110).<sup>31</sup> Article 3 of the UNFCCC was a success for the G-77, because it ensures that equity considerations will guide future negotiations on climate change:

The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of *equity* and in accordance with their *common but differentiated responsibilities* and respective capabilities. Accordingly, the developed country Parties should take the *lead* in combating climate change and the adverse effects thereof [my emphasis].

This question of a fair distribution is especially relevant for the governance of the global commons, defined as “the natural resources and vital life-support services that belong to all humankind rather than to any one country” (Young, 1994, 19-26 quoted in Chasek *et alia*, 2010, 15). Thinking about the global commons well before the emergence of a well-established sub-discipline on global environmental politics, Hardin (1968) set the tone for later scholarly work in his widely read article “The Tragedy of the Commons” by predicting that free access to commons would lead to their rapid depletion or degradation, in the absence of any regulation to govern the sustainable use to these commons. In contrast to other environmental issues, “the resource units of commons are both finite, meaning that there are limited amounts of them, and subtractive, implying that, when a resource unit is consumed by one actor, it is no longer available to others” (Soroos, 2005, 38). Such ‘tragic’ dynamics are clearly at work in the global commons, as demonstrated by pollution of the oceans, depletion of fish stocks and the littering of outer space with ‘space junk’ from spacecraft.

Climate change and the mitigation of its man-made main cause – greenhouse gas (GHG) emissions resulting from massive fossil fuel consumption – is another perfect

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<sup>31</sup> Most global environmental regimes such as the Montreal Protocol on Substances That Deplete the Ozone Layer and the Basel Convention on Hazardous Waste also recognize the differences between industrialized and developing countries.

illustration of a 'tragedy of the commons'. As the process of industrialization started, the atmosphere has been used "an open access common [for] freely disposing of gaseous or aerosol pollutants" (Soroos, 2005, 44-45). The benefits of burning fossil fuels in a given place can contribute to local and national wealth, but the adverse effects of these large-scale activities operate on a global level, beyond national jurisdictions, as "[the atmosphere] has a limited capacity to absorb these pollutants without triggering intolerable amounts of climate change". While authors such as Ostrom (1990) have questioned Hardin's conceptualization of the 'tragedy of the commons', Hardin's metaphor captures well what has happened to a global commons like the atmosphere "with all its de-motivating characteristics in place" (Steurer, 2003, 344). While laws of nature cannot be repealed, international regimes can – in principle – be (re)designed to solve specific environmental problems, such as a 'tragedy of the commons' or negative externalities (Young, 2005, 171-173).

The main challenge for a global regime on climate change is to restrict the states' access to atmosphere for the disposal of the greenhouse gases that their economies produce. There is ample reason to be sceptical about the effectiveness of international environmental regimes or about states as agents of environmental protection. Nonetheless, there is nonetheless ample evidence that international regimes help the process of creating and disseminating (environmental) norms, as the UN Convention on the Human Environment did by disseminating "the basic notion that governments had environmental responsibilities" (Vogler, 2005b, 234-239). However, the level of ambition of these environmental responsibilities in terms of the right of states to emit greenhouse gases into the atmosphere remains hotly disputed between industrialized and developing states, mirroring the diplomatic disagreements over the distributional function of international regimes along North/South lines. New developments within the UNFCCC

framework have been – to put it mildly – underwhelming, particularly after the entry into force of the Kyoto Protocol in 2005. The difficulty in reaching an agreement on the Bali Roadmap in 2007 and the chaotic events during the Copenhagen climate summit point to long-standing and deep disagreements between industrialized and developing countries about how to move international negotiations on emission reductions forward.

As Stone (2004, 280) points out, “[d]isputes over the scope of the [CBDR] are a primary cause” for the decade-long stalemate in the UNFCCC regime: Industrialized and developing states having substantially different positions on how to apply this principle in a new legal instrument after 2012, when the Kyoto Protocol expires. Depledge (2006) talks about the “ossification” of the global climate change regime, as this North/South divide about CBDR has become entrenched. An analysis of debates about the environment and development “shows how negotiations on environment will always flounder and fail if global inequality and the development needs of poorer nations continue to be treated as secondary: again and again, we learn that they cannot be treated in isolation” and “how issues of development persistently ‘spill over’ onto environmental ones” (Roberts, 2007, 4 and 10). To really start tackling climate change, Roberts insists that “we must better understand the world views and beliefs of the world’s poorer nations [...]”. Earlier Constructivist research on international norms in areas other than global environmental policy can be informative to understand how political disagreements about the interpretation of the CBDR principle weaken an emerging global mitigation norm. As indicated earlier, this debate about the exact meaning of the CBDR principle between North and South and the US and China in particular will be instructive for assessing the norm robustness of a global mitigation norm, as defined by Legro (1997).

A focus on the normative questions of the climate challenge can also help to shift the focus away from the more technical issues of emission reduction policies and put emphasis squarely on the quintessentially *political* issues at stake in global debates on climate change. Debates on climate change can quickly become complex and very technical, e.g. discussions on cap-and-trade systems, the use of offsets, greenhouse gas concentration levels, 'fast-start' adaptation finance, LULUCF or 'land use, land-use change and forestry' and so on. Despite such impenetrable jargon in UNFCCC negotiations, many debates on climate change revolve around basic questions of justice and fairness. By focusing on this debate during the 15<sup>th</sup> Conference of Parties in Copenhagen, Constructivism offers the potential of "reconnecting empirical analysis to philosophical discussions about the purposes of political action and the nature of political community. Scholarly analysis of national security and international politics has sidestepped these issues during the last three decades. It should not" (Katzenstein, 1996, 512). Or as Bernstein (2001, 22) framed it with specific reference to global environmental politics: "Knowing the origins of these norms and the processes through which they become institutionalised contributes to opening up critical questions of the kind of order institutions promote, rather than taking the progress of international environmental cooperation for granted". I agree with both authors and so must disagree with the critique by Constructivists of a more Postmodernist inclination that "[Conventional Constructivism] can offer an understanding of social reality but cannot criticize the boundaries of its own understanding [...]" (Hopf, 1998, 183).

Personal concerns about the long-term impacts of climate change and climate justice motivated this dissertation, but the Conventional Constructivist analyses can also contribute to philosophical reflections about global justice and equality as pursued by neo-normative scholars like Wapner and Ruiz (2000), Singer, (2004), Pogge (2005,

2007, 2008, 2010), Beitz (1999, 2009), Beitz and Goodin (2009) and Sachs *et alia* (1998, 2007). A Neo-normative literature that focuses specifically on climate justice is rapidly emerging (Vermeersch & Weiler, 2005; Page, 2006; Harris, 2010; Parks & Roberts, 2007; Northcott, 2007; Roberts & Parks, 2007; Garvey, 2008; Antholis & Talbott, 2010; Gardiner, 2010; Posner & Weisbach, 2010). The debate about Normative Power Europe can also bridge this climate justice literature with the work of International Relations scholars, as it opens up question about “how we might best judge what the EU should be doing in world politics” (Manners, 2008b, 45). While cautioning against an overly utopian approach to international politics, E.H. Carr also warned before the Second World War against an overly Realist International Relations discipline, which could “result in cynicism, if the only function of thinking is to study sequences of events, which it is powerless to influence”. For Carr, politics consists of both utopia and reality and International Relations theory should incorporate both elements: “Mature thought combines purpose with observation and analysis” (Carr, 1946, 10).

## **II.6. Domestic factors in norm diffusion: Ultimately, all politics is local**

Multilateral negotiations in the context of the UNFCCC will play a significant role for the diffusion of a global mitigation norm. However, such a global mitigation norm will ultimately have to influence national policies in a given domestic context, requiring governments to implement cap-and-trade systems, promote renewable energy, and so on. One of the most-debated issues in International Relations theory is the relationship between the domestic politics of sovereign states and international-level politics. This has been a particular bone of contention between Neo-Realism and Neo-liberalism. Neo-Realists such as Waltz (1979) contend that the anarchical structure of international politics shapes the foreign policies and military strategies of states. Against this overly

structural view of international structures, Neoliberal Institutionalists contend that “a theory of international politics must include the domestic politics of the units, to the extent that they shape foreign policy” (Dougherty & Pfaltzgraff, 2001, 85). For example, Putnam (1988, 427) has suggested that international negotiations can be conceptualized as a “two-level game”, in which “central decision-makers strive to reconcile domestic and international imperatives simultaneously”. Within the International Relations discipline as it stands today, most will agree with the following remarks by Putnam (1998, 460):

It is fruitless to debate whether domestic politics really determine International Relations, or the reverse. The answer to that question is clearly ‘Both, sometimes’. The more interesting questions are ‘When?’ and ‘How?’.

Where can we situate Constructivism in this debate about the ‘Second Image’ or the ‘Second Image Reversed’ (Gourevitch, 1978)? Constructivists have emphasized that the normative structure of an international society of states has an impact on the domestic politics of states. For example, Finnemore (2003, 147) identifies international institutions and law as an important mechanism of change:

Agents seeking to change social purpose often target law and institutions as means of converting their alternative vision into widely influential social reality. Individuals, social movements, and activist states have all found that codifying a new social purpose into a treaty, into a new organisation, or into new resolutions by existing organisations are powerful ways to reshape social structures and social purpose. [...] Law can thus turn the vision of a few into social reality for many.

This is why norm entrepreneurs have always concentrated their efforts on developing international law (Risse and Ropp, 1999, 276-277). As noted earlier, Constructivists have presented the power of international norms with concepts such as “the boomerang pattern” (Keck & Sikkink, 1998, 12), “norm cascade” (Finnemore & Sikkink, 1998, 902) and “the spiral model” (Risse & Sikkink, 1998, 22-34). While the latter insist that their five-stage model “does not assume evolutionary progress toward norm implementation”

(Risse & Ropp, 1999, 259-266), little theory is developed to explain major variations within their case selection.

Neoliberal Institutionalists such as Moravcsik (2001, 178) have criticized this lack of explanation and challenged constructivists to develop mid-range theory, which “must specify concrete causal mechanisms through [...] with the ultimate goal of saying something about *which* ideas and discourses influence (or do not influence) *which* policies under *which* circumstances”. A tall order, but several leading Constructivists authors have taken up this challenge to develop theory by researching in more detail the characteristics of domestic ‘norm-takers’ as an important factor for successful norm diffusion, moving away from their primary emphasis on the role of international norm-makers like NGOs or international organizations. To do so, Constructivists need to demonstrate how highly contested international norms have a domestic impact “by countering domestic norms” (Checkel, 1999, 85-86). Analyzing a recent, emerging norm like a global mitigation norm can correct the overly structural accounts of norm diffusion in earlier Constructivist work on norms by drawing attention to “the contingent, historically situated and contextually specific nature of norms” (Park, 2009, 97).

To meet this challenge, Legro (1997, 35) developed the concept of ‘organisational structure’, defined as “patterns of assumptions, ideas, and beliefs that [prescribe] how a group should adapt to its external environment and manage its internal affairs [...]”. Checkel (1999, 85) urges Constructivists to take their core argument – the *social* nature of international politics – seriously and avoid outside-in, structural explanations. Checkel suggests that norm diffusion will be “more rapid when a cultural match exists between a systemic norm and a target country, in other words, where it resonates with historically constructed domestic norms [...]”. Checkel (1999, 87) defines ‘cultural match’ as “a

situation where the prescriptions embodied in an international norm are convergent with domestic norms, as reflected in discourse, the legal system (constitutions, judicial codes, laws), and bureaucratic agencies (organisational ethos and administrative procedures). Cortell and Davis (2000, 69) offer 'domestic salience' of an international norm as the independent variable, defined as "a durable set of attitudes toward the norm's legitimacy in the national arena, such that the norm is presumptively "accepted as a guide to conduct and a basis for criticism, including self-criticism (Fallon, 1992 cited in Chayes & Chayes, 1995)".<sup>32</sup> Rather than finding a fit/match/salience between an international norm and a domestic political context, Elgstrom's (2000, 458) research on mainstreaming gender in the EU's development assistance reminds Constructivists to pay more attention to 'norm resistance', because "instrumentally guided negotiation behaviour is equally important to explain norm diffusion".

However, the international pressure to commit to higher environmental standards like a mitigation norm does not take place in a political vacuum: Environmental norms need to fit within a domestic political setting, where concerns about economic competitiveness in the world economy tend to dominate. Given the global economic pressures, such concerns are present in both industrialized as well as in developing states. For example, an environmental norm that obliges states to achieve economy-wide emission reductions can have negative implications for economic sectors like the energy and transport sector that are both carbon-intensive and sensitive in their national economies. As mentioned earlier, Constructivists have not explored environmental norms in great detail, which leaves the question how global environmental norms run counter to dominant economic norms in the domestic context unanswered.

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<sup>32</sup> In the field of Comparative Politics, Hall's (1989, 370-375) research of on "The Political Power of Economic Ideas" and Keynesianism in particular also points to the importance of the domestic setting and the economic, administrative and political viability of specific ideas.

In *The Compromise of Liberal Environmentalism*, Bernstein (2001, 3) explores how a new concept such as sustainable development was only able to “bring environmentalism into the mainstream of international governance [...] by reformulating environmental concerns in the context of a liberal international economic order”. Tracking the normative changes from the 1972 Stockholm Conference to the 1992 Earth Summit in Rio, Bernstein (2001, 87) demonstrates how “the shift in norms from a juxtaposition of environmental protection and development to the compromise of liberal environmentalism” occurred. The concept of sustainable development no longer treats economic growth and environmental protection as contradictory and “accepts the liberalization of trade and finance as consistent with, and even necessary for, international environmental protection” (Bernstein, 2001). While focused on developments at the international level, Bernstein’s (2001, 20-22) main argument that “the *social* fitness of proposals for new norms with extant social structure better explains why some norms are selected, while others fall by the wayside” can also help us understand how, for instance, a global mitigation norm can fit within a given domestic context. Whether new norms ‘fit’ in a domestic context depends on three factors: “*the perceived legitimacy of the source of new ideas, fitness with extant international social structure; and fitness with key actors’ identities at various levels of social structure* [emphasis in original]” (Bernstein, 2001, 20-21).

Bernstein’s emphasis on the social fitness of new norms remains primarily focused on the ideational level. This is understandable in the context of an International Relations discipline, where materialism has dominated for decades. However, if International Relations scholars want to explain the (lack of) success of global environmental norms in a domestic context, focusing on Bernstein’s ‘norm complexes’ like sustainable

development alone may not be sufficient: Material factors need to be included in the analysis. Or as Nagtzaam (2009, 9) put it, our research questions should ask “how much the successful norm has mattered relative to other norms *and* material factors [...] [my emphasis]”. This attention to material factors goes back to Falkner’s (2007, 522) point that there can be a correlation – but not a deterministic causal link – between domestic interests and the international identity of an actor like the EU, which “is in fact symptomatic of deeper tensions between competing normative aspirations and between different domestic interests”.

Constructivism does not dismiss the importance of material factors or interest calculations, but argues that ideational/normative factors continually shape the decision-making process. In other words, what is perceived to be in the ‘national interest’ is not exogenously given, but is driven by an endogenous political process and cannot be a *priori* defined. In his Constructivist analysis of three international environmental regimes, logging, whaling and Antarctica, Nagtzaam (2009, 317-318) comes to the conclusion that there are “significant limits to the power of persuasion” and that “the constructivist analysis of norm development is limited when it comes to norm failure in circumstances where entrenched interests hold sway”. Nagtzaam’s conclusion is relevant for climate change, where the domestic political economy of actors will also influence whether a norm on mitigation will have a domestic impact. For example, the carbon intensity of an state’s energy sector and the presence of key industries, such as steel and cement, is particularly relevant, as this will affect the transition costs of moving to a low carbon economy.

This literature is key to explore how the two actors under investigation in this thesis – the EU and China – have responded to emerging, normative pressures to tackle climate

change and reduce their emissions. Checkel (2004, 237) has warned time and again against moves to present actors like the EU as “a polity in the making”, where many scholars expect a densely institutionalised setting like the EU to be a regime where the international/supranational level trumps the national level. His research has empirically demonstrated that “European identities, discourses and public spheres are still dominated by their national counterparts or, at best, coexist uneasily side by side with them” (Checkel, 2004, 237; see also Checkel, 1999; Checkel & Katzenstein, 2009). The evidence presented in this thesis attest to the accuracy of this observation by demonstrating how the ambitions of climate politics in the EU continues to be limited in significant ways, because energy policy largely remains a national matter. Hence, an analysis of the ‘domestic’ politics of the EU – i.e. the Member State level – is required. The same goes for China, where the material constraints on moving to a low-carbon economy are constrained given its coal-dominated, carbon-intensive energy mix and spectacular economic growth rates are combined with a dose of suspicion against foreign meddling in domestic affairs. The remarkable economic rise of China over the last decades in combination with the resulting environmental pressures, particularly China’s increasing emissions, raise questions about China’s role in international politics. This is the subject of the next section.

## **II.7. The role of China in international affairs and European Union-China relations**

When Deng Xiaoping started an economic reform process in 1978 by allowing foreign companies to invest in China, few could have foreseen the spectacular economic development in the last decades. The major changes in China’s economy over the last 30 years are also reflected in Chinese foreign policy, which is undergoing a process of expansion (*kuozhang*) with high-level visits by Chinese officials all around the world,

including to developing countries; and reconstruction (*chongjian*), which has led to a consideration of new ideas about International Relations (Lanteigne, 2009, 2).<sup>33</sup> Academics are debating these changes and their implications for the current and future role of China in world affairs (Wang *et alia*, 2004; Deng & Wang, 2005; Chong, 2006; Taylor, 2006; Alden, 2007; Denoon, 2007; Guo & Hua, 2007; Rotberg, 2008; Leonard, 2008; Reid & Zheng, 2009; Hickey & Guo, 2010; Sornarajah & Wang, 2010). Published research tends to focus on how China is encroaching on the 'spheres of influence' of the US, in Asia, Africa and the Western Hemisphere. As a result, the academic debate has often been focused on the so-called Group of 2 or G2, i.e. the bilateral dynamics between the US and China (Johnston & Ross, 1999; Johnston, 2003; Terril, 2003; Hao & Su, 2005; Dillon, 2007; Levin, 2008; Roett & Paz, 2008; Guo & Guo, 2010; Mandelbaum, 2010). However, Economy and Segal (2009) have called the idea of a G2, run by the US and China, a "mirage", because "the very real differences in values and enforcement capacities between the two countries will lead nowhere, except to the creation of more empty frameworks for dialogues and never-ending dialogues to establish more frameworks". Instead, they advocate for "a far more flexible, multilateral approach to China", which involves the wider international community in dealing with the challenges related to China's rapid evolution. Expanding the focus to include the EU and the multilateral discussions on climate change in the UNFCCC framework is a good starting point to avoid studying China's role in international affairs exclusively through the prism

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<sup>33</sup> At the height of the Cultural Revolution, Chinese diplomatic contacts were very limited, as Chairman Mao Zedong was suspicious about the newly established United Nations as a result of the lack of recognition of the People's Republic of China and the approval of the 1950 Korean War by the United Nations Security Council (UNSC). Since 1970, many non-communist countries sought contact with China; China was able to regain its seat as a Permanent Member of the UNSC with the support of the many newly independent developing countries. As a result, China has since closely linked its foreign policy to positions of the G-77 as a champion of the developing world. While strong Westphalian, state-centric views of state sovereignty have remained from the Maoist era, China's foreign policy with regard to international cooperation in a UN context has undergone a sea-change (Lanteigne, 2009, 11).

of Sino-American relations.

The diplomatic relationship between the EU and China predates diplomatic relations between the US and China, which only formally recognized each other in 1979. China established diplomatic relations with the, at the time, European Economic Community in 1975 and concluded its first Trade and Cooperation Agreement in 1978, which was renewed in 1985. Through these agreement, China and the European Economic Community granted each other the Most-Favoured Nation status in their mutual trade relations. However, the scope of EU-China diplomacy is more limited than US-China relations, which is also reflected in the relative volume of research on Sino-European relations. Negotiations to upgrade the 1985 EU-China Trade and Cooperation Agreement to a broader Strategic Partnership started in 2007. A 2006 Communication of the European Commission (2006, 2-3) anticipated a mutually beneficial partnership, as “the EU and China need to work together as they assume more active and responsible international roles, supporting and contributing to a strong and effective multilateral system”. This Communication contains a clear expectation from the EU for China to relinquish “its foreign policy as one of strict non-interference”, which the EU views as incompatible with China’s growing international responsibilities. From China’s side, the Ministry of Foreign Affairs published a policy paper on the EU in 2003. A growing academic research on the bilateral relations between China and the EU mirrors this mutual diplomatic interest in improving Sino-European relations (Barysch *et alia*, 2005; Zaborowski, 2006; Geeraerts, 2007; Kavalski, 2007; Kerr & Fei, 2007; Scott, 2007a, 2007b; Shambaugh *et alia*, 2008; Casarini, 2009, Snyder, 2009; Ross *et alia*, 2010).

In particular, environmental issues, such as climate change, have been identified as “a ‘strategic’ key in EU-China relations” (Scott, 2009). The EU identifies sustainable

development as a key challenge for its partnership with China and lists “ensuring secure and sustainable energy supplies” and “combating climate change and improving the environment” as priorities (European Commission, 2006, 2-3). While China puts cooperation on trade and economic issues at centre stage, it also sees the policy areas of environment and energy as priorities. Climate change is explicitly mentioned under the environment heading, and China-EU energy cooperation is to be expanded “in such fields as energy structure, clean energy, renewable energy and energy efficiency and saving” (Foreign Affairs Ministry PRC, 2003, 8-9). Both China and the EU express a mutual interest in moving forward in the area of environmental protection and the fight against climate change. The 2005 EU-China Partnership on Climate Change exemplifies this. Some recent publications on the importance of environmental and clean energy issues in the EU-China relationship have been published since 2005, originating from both academics and think tanks, addressing the potential of low-carbon economic development in China and the EU-China dialogue on climate and energy (Chatham House, 2007; PEW, 2007; Siu, 2008; Buijs, 2009; Freeman & Holslag, 2009; Maybe, 2009; Wang & Watson, 2009; Amineh & Guang, 2010).

One of the major findings in the literature on EU-China relations in general, as well as their dialogue on climate change and clean energy, emphasizes the potential for mutually beneficial cooperation between China and the EU. From China’s side, its bureaucrats perceive a compatibility between Chinese and European perspectives, such as the value of multipolarity, economic globalisation, global institutions like the UN and so on. The EU is seen as another emerging ‘pole’, which, along with China, has a vested

interest in promoting multipolarity.<sup>34</sup> China's EU policy paper from 2003 also emphasizes that common ground between the two partners far outweighs disagreement:

Both China and the EU stand for democracy in International Relations and an enhanced role of the UN. Both are committed to [...] promoting sustainable development through poverty elimination and environmental protection endeavours (Foreign Affairs Ministry PRC, 2003, 2).  
Apart from the 'usual' frictions, for instance on the issues of Tibet, human rights and the European arms embargo on China, "[c]omplementarity' is the word that is most often used to define relations between Chinese and European economies" and "there is a widespread perception that respective views of the world fit comfortably with each other and that political convergence is reinforced by the absence of serious security and geopolitical conflicts on the mutual agenda [...]" (Shambaugh, 2008, 128-129).

While "there is a greater willingness to learn from other states and other international players (such as organisations)" (Lanteigne, 2009, 2), there remains a wariness in China that the EU has not given up its "scheme to westernise China", which is problematic due to the very different values and ideologies in China and the EU (Peruzzi *et alia*, 2007, 15 and 20). Specifically, the extent to which international policy discussions within multilateral organisations are allowed to influence domestic policy discussions in China tends to be restricted, particularly when compared to an actor like the EU (Zabarowski, 2006, 111). For example, "[c]ritics of China's multilateralism policy suggest Beijing's embrace of international regimes and norms, while developing, is in many cases shallow or conditional. The era of deep engagement in international institutions, it has been argued, only began in the mid-1990s and Beijing still exercises great caution with regimes, occasionally tending to be passive or even free-riding" (Lanteigne, 2009, 66). Kerr and Fei (2007, 33) point out that a 2005 speech by President Hu Jintao urged UN

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<sup>34</sup> Commentators in China on the EU, who share a more realist focus, are sceptical about the EU as an emerging pole that could be a 'counter-hegemonic' power vis-à-vis the US, due to the lack of European 'hard security' capabilities (Zhu, 2008, 150).

Member States to “uphold multilateralism to realize common security”, while simultaneously asserting that “we should all oppose acts of encroachment on other countries’ sovereignty”. These diverging tendencies in Chinese foreign policy were demonstrated by Beijing’s reluctance in 2003 to share information and permit assistance of the World Health Organisation (WHO) to contain an outbreak of the Severe Acute Respiratory Syndrome or SARS, despite being a member of the WHO. For Odgaard and Biscop (2007, 65-66), this “indicates that China has yet to accept the consequences of membership of international institutions, especially when it comes to transnational threats that potentially involve external parties in the domestic politics of states”.

This tendency in China’s foreign policy to prevent outside meddling in domestic affairs is particularly problematic for transnational issues, such as climate change. There is a clear link between China’s domestic energy policies and the dominance of coal-fired power plants in China’s energy mix and its status as the world’s largest emitter of GHG into the atmosphere. The growing concerns in the EU and elsewhere in the world about the environmental impacts of China’s economic growth have led to more research on environmental problems in China. Some authors (Smil, 1976, 1984, 1988, 2004; Economy, 2005, 2006, 2010; Blazey, 2007; Organisation for Economic Cooperation and Development, 2007a; Song & Woo, 2008, China Environment Forum, 2011) have done research on the environmental degradation that resulted from the spectacular economic development. Given the major contribution of China’s energy sector to global environmental problems, a number of scholars have focused on developments in China’s energy policy (He & Qin, 2006; Cherni & Kentish, 2007; Gee *et alia*, 2007; Steinfeld *et alia*, 2008; Fischer-Vanden, 2009; Meidan *et alia*, 2009; Morse, 2009; Victor & Morse, 2009; Liu & Gallagher, 2010; Zhao & Ortolano, 2010) and environmental governance (Zhao, 2005; D’Sa & Murthy, 2006; Economy, 2006, 2007a, 2007b;

Sitaraman, 2006; Heggelund, 2007; Schroeder, 2009a, 2009b, 2009c; Shin, 2010; Tsang & Kolk, 2010).

As outlined above in Section 1.4 on case selection, the EU's promotion of a global mitigation norm vis-à-vis China constitutes a 'critical case' for Constructivist theory building about the diffusion of global environmental norms. This dissertation will examine China's interactions with international regimes such as the UNFCCC and also analyze the interactions between the EU and China. This research focus will enable me to explore China's perception of the EU's leadership on climate change and how the EU has contributed to a learning process on climate change by engaging China's political elites with the right frames on how to tackle China's rising emissions. In addition, an analysis of Chinese foreign policy on climate change in the multilateral context of the UNFCCC and the disagreements about how to interpret the CBDR principle can advance Constructivist theory-building by empirically demonstrating how a lack of norm robustness reduce the impact of international law on the likelihood of norm diffusion. Finally, a closer look at China experiences with a flexibility mechanism like the Clean Development Mechanism can contribute to our understanding of how such international institutions on climate change contribute to learning in domestic policy areas such as energy and environment within China.

## **Chapter III: The European Union and climate change: 'Green' Normative**

### **Power Europe in action?**

#### **III.1. Introduction**

The 15<sup>th</sup> Conference of Parties of the UNFCCC in Copenhagen was to be 'Europe's hour'. Building on a reputation that stretches over more than a decade as a global environmental leader, European leaders went to UNFCCC climate summit in Copenhagen with the belief that the EU could lead the 15<sup>th</sup> Conference of Parties to an ambitious climate agreement. For evidence of this leadership, EU leaders pointed to the implementation of the EU's Climate and Energy Package, the EU's conditional offer to increase its mitigation target from 20% to 30%, combined with the prospect of adaptation finance for developing states. According to European policy-makers, this comprehensive diplomatic 'package' had the potential to change the previously acrimonious dynamics of UNFCCC negotiations. Europe's new calling seemed to be as a global environmental leader, raising the world's awareness about climate change and leading the world economy towards a low carbon transition. What was envisioned by many leading opinion-makers is nothing less than a leading role for the EU in the next industrial revolution. Numerous European politicians have harkened back to previous 'grand projects' that were successful, particularly energy-related projects such as the European Coal and Steel Community or the European Atomic Energy Community. This led Danish Energy and Climate Change Minister Lykke Friis to advocate for a major step forward in the European integration process:

I am convinced [...] that we have come full circle: the EU started out with energy, as a coal and steel union, and now we are back to basics: it is once again energy policy (Vincenti-Mitchener, 2010).  
Or in the words of David Miliband (2009), the former Foreign Secretary of the UK:

The EU thrives on big projects: peace and reconciliation after the Second World War, the single market, the Euro and enlargement. The next big project for the EU – the environmental union – is to be the catalyst for a world beyond carbon.

While many of these EU ‘grand projects’ have been essentially elite-driven, recent public opinion polls (e.g. Eurobarometer surveys) consistently identify climate change as a major problem and support a more active role for the EU in reducing the EU’s emissions (European Commission DG for Communication, 2008). These results confirm the conclusion of Lenschow & Sprungk (2010, 151) that an identification with a Green Europe in European public opinion is taking place, which:

transforms the old notion of the EC/EU as a ‘motor of peace and stability’ into a modern image of protection. This new image may have a higher appeal to the younger generation of European citizens than the post-war foundational myth of European integration”.

Lenschow and Sprungk (2010, 146) conclude that ideas about the EU as an ‘environmental union’ or ‘Green Europe’ is contributing to a common European political identity and the legitimacy of EU governance in the eyes of Europeans.

The EU seemed to live up to its new and ‘green’ mission statement by passing the EU’s Climate and Energy Package in December 2008. The EU agreed and started implementing the most ambitious set of climate policies among all industrialized countries, which includes some of the most ambitious targets in a politically challenging context.<sup>35</sup> First of all, the Climate and Energy Package was approved in an economically and financially difficult situation with the onset of the 2008 ‘great recession’, as the fallout of the sub-prime mortgage crisis in the US also hit the EU’s economies. Moreover, the EU had enlarged its membership to include ten new Member States, mainly less economically advanced states from Eastern Europe. The Climate and

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<sup>35</sup> Other industrialized countries such as Japan and Australia have announced more ambitious targets above 20%, but these announcements have so far failed to gain traction in their respective domestic legislative processes.

Energy Package was one of the first major ‘dossiers’ that the EU had to decide with 27 Member States. Since membership of the EU almost doubled after the 2004 enlargement, this obviously complicated decision-making. Thirdly, all ‘low-hanging fruit’ mitigation options, such as a fuel switch from coal to gas in the UK in the early 1990s, had been taken and the complete collapse of Eastern European economies after the fall of the Berlin Wall and the subsequent drop in emissions could no longer provide the EU with a buffer to easily achieve its targets.<sup>36</sup> In other words, the next generation of ‘post-2012’ emission reductions would need to be policy-driven, not economy-led. Last but not least, the Intergovernmental Panel on Climate Change called for steeper emission cuts to have any chance of avoiding ‘dangerous’ climate change, for example in the range of 25% to 40% emission reductions compared to a 1990 baseline in industrialized states by 2020.

However, passing and implementing the Climate and Energy Package was not only a matter of ‘going green’ or ‘doing the right thing for the environment’ for the EU. The EU’s climate policies are about more than just climate change. Support for Europe’s competitiveness in a booming global renewables sector, green jobs, energy security, and so on also reinforces the EU’s leadership role on climate change. While climate change remains first and foremost an environmental problem, a curious development has taken place over recent years, whereby solving the climate crisis – substantially reducing emissions – is also presented as a major economic opportunity for the EU and other industrialized countries, as well as developing countries. In the words of European Commission president Jose-Manuel Barroso and Swedish holder of the EU presidency Frederik Reinfeld (2009):

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<sup>36</sup> In the energy sector, ‘low-hanging fruit’ options refer to inexpensive measures that can be taken in the short term and that can be implemented immediately. Typically, such options are improvements in energy efficiency.

[Tackling climate change] will stimulate the necessary investments to create a green economy, creating new jobs and driving growth over the next two or three decades. Those who understand this today will be the winners of tomorrow. The post crisis economy will be very different from its predecessor. And we will not get the same chance twice (Barroso & Reinfeld, 2009).

Former Commission president Jacques Delors (2010) believes that more action by the EU in this policy area can bring a solution to a whole panacea of the EU's long-standing problems:

Europe needs a common energy policy in order to guarantee access for its citizens to energy at reasonable and stable prices; to maintain its industrial competitiveness; to promote sustainable development and the transition to a low-carbon society; and to ensure security of energy supply for all Europeans.

By engaging with Ian Manners' conceptualisation of the EU as Normative Power Europe and its critiques, this chapter addresses to what extent a global mitigation norm has become accepted within the EU, and its normative influence over the development of EU-level climate and energy policies. I argue that Manners' Normative Power Europe concept does not accurately reflect the EU's leadership on climate change for two reasons. First, there is considerable diversity among the EU's Member States in their attachment to a global mitigation norm and its requirement to cut emissions. In particular, Eastern European Member States have mounted considerable 'norm resistance' in EU-level negotiations on climate and energy policy and successfully used references in the Lisbon Treaty to a need for "a spirit of solidarity between Member States" in energy-related and environmental matters. Secondly, the Normative Power concept cannot account for the fact that economic motivations – a growing belief among European policy-makers in a 'first mover advantage' for the EU of transitioning to a low-carbon economy – have pushed the EU to adopt ambitious mitigation targets, rather than a growing attachment to a global mitigation norm.

This argument is analysed in the context of the compromises on post-2012 mitigation targets in the Climate and Energy Package, and the EU's discussions about a move to a unilateral target of 30%, regardless of whether other major emitters of greenhouse gases make a comparable effort. A major drop in emissions within the EU as a result of the 2008-2009 economic crisis, reignited the political debate in the EU during the first half of 2010 about the appropriate level of ambition for the EU as a global climate leader.

### **III.2. Theoretical framework**

These divergent justifications for the EU's leadership on climate change speak to a long-standing debate between Rationalist and Constructivist approaches in IR. Among leading Constructivists, a degree of consensus has emerged that opposing a 'logic of consequences' with a 'logic of appropriateness' or a dichotomy of 'power vs. norms' is too simplistic. Fearon and Wendt (2002, 53) are right to insist that "there is little reason to think that human behaviour toward norms is either *always* self-interested or *always* a function of perceived legitimacy [emphasis in original]". Finnemore and Sikkink (1998, 911) have observed that "the fights are not about (or should not be about) whether rationality plays a role in norm-based behaviour. The fights are about the nature of the link between rationality and norm-based behaviour". An analysis of the EU's self-proclaimed 'leadership' on climate change can inform this theoretical debate. This question of the 'real' motivations of international actors like the EU to comply with e.g. environmental norms on climate change remains a point of contention. Are actors motivated by material self-interest, i.e. utility maximisation? Or does norm-conforming behaviour occur "because actors internalize roles and rules as scripts to which they conform, not for instrumental reasons [...] but because they understand the behaviour to be good, desirable and appropriate?" (Finnemore & Sikkink, 1998, 911). Fearon and

Wendt (2002, 53) question the ability of scholars to develop a metric “to assess the relative importance of normative versus non-normative motivations in a useful way”.

Yet, much of the debate on the motivations for specific EU foreign policies has tried to cut this Gordian knot. The theory of Liberal Intergovernmentalism as proposed by Moravcsik (1998) “acquired the status of a baseline theory against which new theoretical conjectures are tested and which is used as a ‘first cut’ to explain new developments in European integration” (Schimmelfennig, 2004, 75). Liberal Intergovernmentalism offers a theoretical explanation of events related to European integration by focusing first of all on the domestic preferences of Member States, which reflects “primarily the commercial interests of powerful economic producers” (Moravcsik, 1998, 3). Secondly, “a process of *intergovernmental bargaining* concerning the *distribution* of gains from substantive cooperation”, whereby Member States try to avoid a “collectively suboptimal outcomes and achieving coordination or cooperation for mutual benefit”, explains the outcomes of EU-level policy-making (Schimmelfennig, 2004, 79).

However, the notion that the EU is a different kind of actor, because it can transcend narrow national interests and pursue a normatively inspired foreign policy has also found traction in academic debates. Manners (2002, 238-239) coined the phrase of the EU as “Normative Power Europe”, which characterizes the EU as an ideological power with “an ability to shape conceptions of ‘normal’ in International Relations”. For Diez (2005, 616), such conceptualisations of the EU have “a distinctly social constructivist ring to it”. Manners argues that there is a link between the EU’s innovative political form as “a hybrid of supranational and international forms of governance, which transcends

Westphalian norms” and the progressive policies it promotes in the world.<sup>37</sup> In other words, “the most important factor shaping the international role of the EU is not what it does, but what it is” (Manners & Whitman, 2003, 389).

The EU’s existence as such a “hybrid polity” can only function because of a strong commitment to a set of shared principles (Manners, 2002, 240). These principles have been laid down in a series of Treaties, the EU’s political-legal constitution, which “represent crucial constitutive factors determining [the EU’s] international identity” (Manners, 2002, 240-241). By focusing on the normative dimension of the EU’s foreign policy, Manners (2002, 241 and 252) wants to draw attention to how the EU has not only become committed to “placing universal norms and principles at the centre of its relations with its Member States (Merlingen *et alia*, 2001) and the world (Clapham, 1999; Smith, 2001)”, but that “this predisposes [the EU] to act in a normative way in world politics”. For example, one of the features of a Normative Power like the EU is, according to Manners (2002, 252-253), its willingness to disregard “the absence of obvious material gains from its interventions (the extent to which they have costly consequences for important economic relations)” in its efforts “to redefine international norms in its own image”. Manners’ conceptualisation of the EU as Normative Power has been applied to analyses of the EU’s promotion of human rights and democracy in its neighbourhood (Adler, 2006) and further afield (Lerch & Schweltnus, 2006; Sjørnsen, 2006a), to labour rights (Orbie, 2009) and to EU foreign policy in general (Lucarelli & Manners, 2006). The EU’s leadership role in global environmental negotiations has been considered as good case study to test the credibility of the EU as a Normative Power. Scholars have analysed the EU’s foreign policy during the World Summit on Sustainable

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<sup>37</sup> Manners’ (2002) analysis focuses on the EU’s efforts to abolish the death penalty.

Development (Burchell & Lightfoot, 2005) and on the Kyoto Protocol (Groenleer & Van Schaik, 2007; Scheipers & Sicurelli, 2007).

Clearly, Manners' work on Normative Power Europe has struck a chord with many scholars. However, it has also attracted a number of criticisms. For example, Diez (2005, 615) has called "for a greater degree of reflexivity, both in the academic discussion about normative power, and in the political representations of the EU as a normative power [...]". Sjursen (2006a, 235) has similar concerns, because the Normative Power concept "corresponds very closely to the EU's own description" and suggests "identifying criteria and assessment standards that make it possible to qualify, substantiate or reject such a claim". These authors share the basic Constructivist tenets of the Manners' Normative Power concept and offer suggestions to improve its usefulness within that framework. I believe that these concerns about the Normative Power concept and its strong emphasis on the EU's normative commitments are justified and offer an opportunity for theoretical bridge-building between the Constructivism-inspired Normative Power concept and an approach like Liberal Intergovernmentalism, which has not been focused on normative factors.

Liberal Intergovernmentalism interest in the preference formation of Member States at the domestic level is a useful addition to Constructivism's analytical focus on the emergence of norms at the international level. An article by Falkner is of direct relevance for the EU's stance on climate change, as it also covers an area of environmental policy-making, namely the regulation of bio-technology. Falkner (2007, 511 and 513) insists that, "while normative concerns may be a motivational force and inform interest formation, we can only gain a fuller understanding of the EU's external role if we place it in its political-economic context". Falkner defines the political-economic context as "the

interplay of domestic interests, both economic and societal, within Europe's multilevel governance system and the broader ideational environment that shapes society's values and preferences". For Falkner, the Normative Power Europe concept "mistakes the export of domestic norms with the pursuit of global interests and universal values" and "fails to take into account the domestic interest structure that underpins regulatory internationalization". Along similar lines, Kelemen (2010, 338) also asks how "global environmental leadership may have served the material interests of the EU" and suggests to explore "a political economy-based explanation for the emergence of EU leadership in international environmental politics".

Secondly, norms tend to 'emerge' in Constructivist accounts, usually "pictured as a relatively simple learning process, characterized by imitation and hastened by persuasion and information sharing" with norm entrepreneurs (e.g. environmental NGOs) leading the way (Elgstrom, 2000, 460). The focus of Liberal Intergovernmentalism on intergovernmental bargaining can direct our analysis to how norms actually get negotiated through an often conflict-ridden process. Exploring how the norm of gender equality mainstreaming in the EU's decision-making on development aid occurred, Elgstrom (2000, 458) marries a "constructivist approach to norm spread with a negotiation perspective" for the following reason:

[C]onstructivists have paid too little attention to *norm resistance* [my emphasis] and that instrumentally guided negotiation behaviour is equally important to explain norm diffusion. Attention has to be paid to the interplay between persuasive processes and strategic deliberations in order to understand norm change in the EU.

While new norms can appear very attractive and have powerful backers, we should be mindful of the fact that "[e]xisting norms are change resistant. Adherents of old norms actively oppose the introduction of novel ideas that compete for resources and attention" (Elgstrom, 2000, 458). These two elements – domestic political economy and norm

resistance – also help to answer the critiques by Legro (1997) and Checkel (1999a, 86) that “[i]t is odd that constructivists with their emphasis on social context, would utilize such an asocial model”.

With these caveats in mind, I believe that the Normative Power Europe concept can help us to tackle the following research question: How strong is the EU’s own attachment as a leader on climate change to a global mitigation norm? Given the continued framing of the EU by European politicians as a leader on climate change, a renewed engagement with Manners’ work on Normative Power is in order. First, this chapter explores whether the EU’s politico-legal structure normatively predisposes the EU to prioritise environmental concerns or whether it offers opportunities for norm resistance. Secondly, I examine to what extent non-environmental motivations – those not directly related to avoiding dangerous climate change – have driven EU climate policy. Given the continued political debates about the trade-off between economic and environmental concerns, I concentrate on whether economic/material gains inform the EU’s leadership position on climate change.<sup>38</sup>

### **III.3. The European Union’s normative predisposition to act on climate change**

Manners (2002, 242) identified five ‘core’ norms in the EU’s politico-legal constitution, namely peace, liberty, democracy, rule of law and human rights, which predispose the EU to act in line with these principles in the formulation of its foreign policies. Aside from these core liberal values, other “minor” norms such as e.g. ‘sustainable development’ also form an integral part of the EU’s constitutional practice, although Manners (2002,

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<sup>38</sup> Concerns about energy security also played a role in the EU’s decision-making on the Climate and Energy package. However, this issue could not be covered within the scope of this chapter.

242) admits that “these [minor norms] are far more contested”.<sup>39</sup>

One of fundamental ‘*raison d’être*’ and guiding principles for the EU, which is accorded the same level of importance as the internal market, balanced economic growth and full employment, is “a high level of protection and improvement of the quality of the environment” (Article 2.3 Treaty on European Union). Moreover, Article 11 of the 2009 Lisbon Treaty<sup>40</sup> commits the EU in *all* its policies to environmental protection:

“Environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development”.

The promotion of “measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change” is now also included as one of the prime objectives for environmental policy in article 191 of the Lisbon Treaty.

The decision-making on the EU’s overall target for the first commitment period of the Kyoto Protocol was able to insulate itself relatively well from other non-environmental considerations, be they economic, industrial, energy or social concerns (Groenleer and Van Schaik, 2007, 986-987). The energy crisis of 2006-2007, the economic crisis of 2008-2009 and the 2010 public financing challenges of a number of EU Member States

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<sup>39</sup> While the Lisbon Treaty only entered into force after the approval of the EU’s Climate and Energy Package in 2009, European Heads of States and Government signed onto the Lisbon Treaty in 2007. The Lisbon Treaty is relevant in an analysis of EU energy and environment policies. Many of its provisions were copied word for word from the EU’s previous Constitutional Treaty, which was not ratified after failing to achieve a majority in favour of its ratification in referendums in France and the Netherlands in 2005. Moreover, the debate on the EU’s constitution ran parallel to policy discussion on European climate policies in view of the expiry of the Kyoto Protocol after 2012.

<sup>40</sup> Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007 (Official Journal C 306 December 17, 2007). For the consolidated version of the Lisbon Treaty, see Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union (Official Journal C 83 of 30.3.2010).

made the relative isolation of climate policy problematic. This was exacerbated by more calls from European industries to tone down the EU's unilateral ambitions in the face of these economic concerns. The next generation of European emission reductions from 2013 onwards needs to be policy-driven, which is a major departure from the situation before the 2008 Climate and Energy Package. Zito (2005, 365) and Costa (2009, 142) showed the inability of the Council of the EU's Working Party on International Environmental issues – Climate Change, which is the main decision-making body within the EU on climate-related issues, to convert their agreements on mitigation targets into commitments from policy-makers in other sectors like energy, transportation and industry.

While these articles and decisions before the 2008 Climate and Energy Package seem to confirm that the EU was unequivocally committed to environmental concerns, other sections in the Lisbon Treaty qualify the EU's normative commitment to environmental protection and the fight against climate change. In the section on the EU's powers to make environmental policy, paragraph 2 of Article 191 strikes a balance for EU policy between the aims of promoting environmental protection, while "taking into account the diversity of situations in the various regions of the Union".<sup>41</sup> This is an important caveat, because of the increased internal diversity of the EU, now that 27 Member States need to agree. Paragraph 4 adds more factors that the EU needs to consider in the development of its environmental policies, which also have direct relevance for the EU's stance on climate change. The EU needs to weigh the available scientific data on climate change, which call for drastic emission reductions in the medium term. However,

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<sup>41</sup> The "economic and social cohesion and solidarity among Member States" was also included among the EU's guiding principles in Article 2 of the Lisbon Treaty.

the EU also needs to take into account “the potential benefits and costs of action or lack of action” as well as “the balanced development of its regions”.

Demonstrating the inextricable connection between the environment, climate change and energy concerns, the next section in the Lisbon Treaty considers the EU’s powers related to energy. Again, the EU needs to balance, among other things, the pursuit of “energy security” with the promotion of “energy efficiency and energy saving and the development of new and renewable forms of energy”. The Treaty emphasizes that these lofty environmental goals can only be accomplished “in a spirit of solidarity between Member States”. To guarantee the proper application of these objectives, article 194.2 of the Lisbon Treaty imposes a special legislative procedure, requiring unanimity in the Council, for those “measures significantly affecting a Member State’s choice between different energy sources and the general structure of its energy supply”. This exception intends to safeguard “a Member State’s right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply”. These rules may not really impact the EU’s ability going forward. As Costa (2009, 135) found, the Council of the EU’s Working Party on International Environmental issues – Climate Change traditionally decides by consensus, “even when the issues at hand only requires a qualified majority voting”. Internal EU negotiations on climate change involve so many policy areas “that virtually all decision-making procedures are permanently involved”. Arguably, the EU’s decision-making by consensus with more Member States in the EU27 instead of the EU15, and an increased diversity among the EU’s membership will prove more challenging.

There have been fears that the EU climate leadership is under threat since the EU membership almost doubled after the accessions of the East European Member States

to the EU. Michaelova (2003, 1) questioned “the ability of the EU to act as a proactive force in climate policy beyond the first commitment period of the Kyoto Protocol” due to the EU’s inability to establish well-coordinated programmes. For Michaelova, the potential for cheap emission reductions in the new Member States “can serve as a buffer until 2012”, but the EU will run out of cheap options after that. However, Skjaereth and Wettestad (2007, 274) found no evidence that EU enlargement has led to an inability to develop environmental policy in the EU27. While this finding is true in general, “the effects of EU enlargement will vary from one issue-area to another. [...] In the case of climate change, the making of the EU [Emission Trading System] was not significantly affected by the [Central and East European Countries], but some of these countries have been slow in implementation”. It is important to note that their rather optimistic assessment only covers the decision-making around the initial establishment of the ETS in 2003 and the 2004 Linking Directive. Later studies found that the ambition behind the EU’s climate policies has indeed lost momentum since Eastern European Member States joined the EU. For example, Oberthuer and Roche Kelley (2008, 46) observed that EU enlargement increased the internal diversity of the EU and that the new Member States have been “less enthusiastic and proactive in supporting stringent climate policies at both the international and European levels”. However, their analysis predates the final approval of the Climate and Energy Package.

Clearly, the ‘minor’ norms – in Manners’ wording – of sustainable development and environmental protection in the politico-legal constitution of the Lisbon Treaty come with some major qualifications, particularly as they relate to the differential impact of EU-wide mitigation targets in different Member States. Two major factors are important. First of all, new Member States are encouraged to catch up in terms of economic development, which is usually accompanied by rising emissions. Limiting emissions could inhibit their

economic growth. Secondly, some of the new Member States also have economies with the highest carbon-intensity in the EU. As the EU sets more ambitious emission reduction targets, the high carbon-intensity of some new Member States' energy mix is problematic and will engender high replacement costs. The 'classic' example is Poland's 92% reliance on coal for electricity production (European Commission DG Energy, 2007b).

Schreurs and Tiberghien (2007, 27) credit the EU's decentralised and relatively open-ended form of governance to explain why the EU has been able to sustain a leadership position on climate change: "Far from creating deadlock, this decentralized multi-polar structure has allowed for competitive leadership and mutual reinforcement to take place on climate change". Their article covers the period from the approval of the first ETS directive in 2003 until the 2007 decision by the European Council to commit the EU to a unilateral mitigation target of 20% and a conditional mitigation target of 30%. The picture that Schreurs and Tiberghien (2007, 24) paint of the EU discussions is one of "mutually reinforcing opportunities for leadership" for a wide range of 'policy entrepreneurs' in the EU, identifying little resistance to the EU's 'ambitious' climate policies for the first commitment period of the Kyoto Protocol, from 2008 to 2012. However, Schreurs and Tiberghien (2007, 42) concluded that:

the EU's ability to maintain climate change leadership role will become more difficult in the future given that in the post-2012 period, all EU Member States will be expected to participate in any EU-wide climate change agreement. [...] This suggests that leadership will be harder, but certainly not impossible for Europe to sustain in the future should it choose to do so.

The EU's ability to maintain its leadership role does not only depend on the appetite for progressive environmental policies in Eastern European Member States, but also on the willingness and ability of richer Member States to finance the costs of transitioning to a low-carbon economy in the new Member States, while their economies are catching up

to Western Europe. Schreurs and Tiberghien (2007, 33) argued that EU leadership on climate change “would not have been possible [...] without European Community-wide acceptance of the principle of differentiated obligations”, which helped to win over “states that would otherwise have vetoed EU climate change policy targets”. Given the increased diversity within the EU27, solidarity among EU Member States will only become more important for the EU to commit to ambitious mitigation targets.

The required “spirit of solidarity between Member States”<sup>42</sup> on energy issues in the Lisbon Treaty explains the importance attached to ‘effort-sharing’ arrangements as an integral part of EU climate policy, which recognizes the very different starting points of various Member States in tackling their emissions. A precursor to the debate on the EU’s Climate and Energy package were disagreements between – mainly – East European countries (Poland, Czech Republic, Latvia, Hungary and Slovakia) and the European Commission over future emission allowances under the EU ETS, that were proposed in their National Action Plans. The Commission wanted to reduce the proposed allowances by more than 25% in some cases, which according to Poland and the Czech Republic, was “discriminatory” and would prevent their industries from catching up. All these new Member States started legal proceedings against the Commission’s decisions before the European Court of Justice (Euractiv, 2007).<sup>43</sup>

Given this opposition to setting ambitious targets for EU climate policy, how have European policy-makers tried to overcome these hurdles and solidify the EU’s climate

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<sup>42</sup> Article 194.1 of the Lisbon Treaty.

<sup>43</sup> The dispute was settled in April 2010 with the Commission winning and lowering Poland’s allowance to 208.5 million tonnes, down 26.7% from the Poland’s previous total allowances of 285 million tonnes (Euractiv, 2010). Bulgaria also dropped its lawsuit against the Commission’s decision. Other East European states are expected to drop their cases (Kruppa, 2010)

*acquis*? A Council official, responsible for climate policy, acknowledged that discussions became more complicated after the 2004 enlargement:

Discussions on the EU's Climate and Energy Package, the ETS and effort-sharing, were difficult, but there are clearly elements of solidarity in that package, how to distribute the burden between the new and old Member States (Author's interview, General Secretariat of the Council of the EU, Climate Coordination unit official, January 19, 2010).

Several concessions 'in the spirit of solidarity' were made to reduce the economic hardship of ambitious mitigation efforts. There is clear evidence for this trend in the Revised Emissions Trading System Directive.<sup>44,45</sup> The EU's Emissions Trading System (ETS) is the "flagship measure" of the EU's climate policies, covering about 40% of EU GHG emissions (Delbeke, 2006 quoted in Ellerman & Joskow, 2008, 1-3). The ETS is a cap-and trade system, which limits the total amount of certain GHG emissions within the EU through a system of permits. This total amount is progressively lowered during the third commitment period, by 21% in 2020. From 2013, the ETS will function with a single, EU-wide cap, losing some of the more decentralised features of the first commitment period, when Member States could set their own cap. However, some concessions were made to countries, whose energy mixes are based on carbon-intensive, coal-fired power stations. One of the compromises struck with regard to the electricity sector included an option for Member States to delay the auctioning of permits. If certain coal-fired power plants lack connection to the energy grid or in case more than 30 % of electricity was produced from a single fossil fuel, and the Gross Domestic Product per capita of the Member State in question was 50 % of the average Gross Domestic Product per capita of the EU-27, auctioning of permits for these installations will only start in 2020 – instead

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<sup>44</sup> Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community (Official Journal L140 June 5, 2009, pp. 63-87).

<sup>45</sup> The most ambitious targets are imposed on the power producing sector, as emission reductions can be achieved most cost-effectively in these sectors and the cost incurred from emission reduction measures can be more easily passed on to the consumer.

of starting in 2013 (Article 10c of the Revised ETS Directive; Council of the EU, 2008, 2). Poland and the Czech Republic have asked the Commission for free allowances for their power plants and Romania is considering also using this option (Coelho, 2010a; Kruppa, 2010a; 2010f). Special transitional rules were also developed in Article 10a for Lithuania, due to its expected rise in emissions resulting from the shutdown of its nuclear power plants. Installations in specific industries within the EU that are subject to the ETS and that are exposed to a significant risk of carbon leakage<sup>46</sup> will receive 100% free allowances at the start of the third commitment period, starting in 2013. Carbon leakage refers to the risk that carbon-intensive industries might relocate to jurisdictions, where little or no carbon pricing mechanisms exist. For industries that are not at risk of carbon leakage and also covered by the ETS, full auctioning will only be achieved in 2027, rather than in 2020 as proposed previously by the Commission (European Commission, 2008b, 3-4).

A legal framework on how to share the effort among EU Member States for the emission reductions required in sectors that are not covered by the ETS.<sup>47,48</sup> Preamble 8 of this Decision emphasizes the solidarity principle between Member States with different levels of economic development in terms of their varying Gross Domestic Product per capita:

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<sup>46</sup> An industry is considered to be exposed to a risk of carbon leakage, if the total cost of the allowances required under the ETS exceeds at least 5% of total production costs and if “the intensity of trade with third countries, defined as the ratio between the total value of exports to third countries plus the value of imports from third countries and the total market size for the Community (annual turn-over plus total imports from third countries), is above 10 %” (Article 10a, para 15 Revised ETS Directive).

<sup>47</sup> Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 (Official Journal L140 June 5, 2009, pp. 136-148)

<sup>48</sup> The ETS covers large point sources, which consist mainly of stationary installations with high emissions like power-plants or cement and aluminium factories. In contrast, non-ETS sectors consist of smaller emitting sources such as cars and trucks transport, (heating of) buildings, smaller industrial installations, and agriculture.

Member States that currently have a relatively low per capita [Gross Domestic Product], and thus high [Gross Domestic Product] growth expectations, should be allowed to increase their greenhouse gas emissions compared to 2005, but should limit this greenhouse gas emissions growth to contribute to the independent reduction commitment of the Community. Member States that currently have a relatively high per capita [Gross Domestic Product] should reduce their greenhouse gas emissions compared to 2005.

In practice, this means that some Member States such as Luxemburg, Ireland and Denmark will need to decrease emissions in non-ETS sectors by 20%, whereas a Member State like Bulgaria will be allowed to increase its emissions by 20%. All new Member States – except Cyprus<sup>49</sup> – will be allowed to increase their emissions. During the negotiations on the Climate and Energy Package, including the ‘Effort-sharing’ decision, Member States became insecure about making firm commitments.

[T]he outcome could not have but reflected the uncertain economic times, especially in the later stages of the negotiations. A package which started its life at the European Council in March 2007 and in times of relative economic optimism, eventually was finalised as reports on the collapse of the financial system stole the headlines from negotiations on the climate and energy package (Lacasta *et alia*, 2010, 111).

This uncertainty led to an increased demand for flexibility for Member States to meet their legally binding obligations under the ‘Effort-sharing’ decision. This call for more flexibility led the Decision’s compromise to allow more international offsets to meet emission targets (article 5) as well as an increased ability for Member States to transfer unused emission allocations to other Member States (article 3.4) or to carry-forward 5% of excess emission reduction to following years in the period 2013-2020 (article 3.3).

Setting targets for renewable energy, to be achieved by 2020 by each of the EU27 Member States, also involved a political decision. Rather than imposing a straightforward link between a specific Member State’s potential for renewable energy

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<sup>49</sup> Cyprus is the only new EU Member State whose Gross Domestic Product per capita is almost equal (97%) to the average Gross Domestic Product per capital of all 27 EU Member States. In contrast, the Gross Domestic Product per capita of Bulgaria is 44% of the EU27 average (Eurostat, 2009).

and its 2020 target, the Directive<sup>50</sup> on the promotion of the use of energy from renewable sources, acknowledges the varying levels of renewable energy potential of Member States, but also that they stand at different stages of economic development: “Giving high targets to countries with relatively low levels of [Gross Domestic Product]/capita was considered to be unfair and unrealistic. Instead, a [Gross Domestic Product] weighting was introduced” (Howes, 2010, 128). It is clear that the emphasis on fairness and solidarity was “a crosscutting theme and objective of the overall climate and energy package” (Lacasta *et alia*, 2010, 100).

The commitment to reduce the EU’s emissions by 20 or 30% by 2020 came in 2007 from the highest political level of the European Council. However, the Climate and Energy Package also involved a lot of compromises and give-and-take by combining a number of climate-related pieces of legislation: “Hence, [...] there was clearly potential for horse-trading and linking between proposals; both of the positive, integrative kind and the negative, complicating kind” (Skaereth & Wettestad, 2010a, 73). The ten new Member States, mainly those from Eastern Europe, have acted as a brake on the ambitions of the EU for higher mitigation targets. The politico-legal structure, as laid down by successive EU Treaties, does not normatively predispose the EU to be a ‘green’ Normative Power regarding climate change. The treaties clearly do not predispose the EU to take a principled approach on climate change or environmental matters generally. Rather, it pushes the EU to carefully calibrate the differential impact of European environmental rules on Member States and balance potentially competing environmental and economic concerns.

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<sup>50</sup> Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC on the promotion and the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003.30/EC (Official Journal L140 June 5, 2009, pp. 16-62).

### **III.4. The absence of material gain from the European Union's climate leadership**

#### III.4.1. Climate-related, non-economic drivers for European Union climate policy-making

Having established that the EU's politico-legal structure does not incorporate a mitigation norm that 'forces' the EU to take on a leadership position on climate change, the question of the motivating factors behind the EU's leadership position and its ambitious Climate and Energy Package – compared to other Annex I countries – looms even larger. Are the EU's mitigation targets driven by environmental concerns such as adherence to a global mitigation norm? Or do other non-environmental motivations – economic benefits, energy security – also play a role? Going back to the question raised at the start of this article, what is the respective importance of normative vs. non-normative considerations?

Clear scientific evidence for climate change is a major driver behind the EU's commitment to reduce its emissions. In the words of a national diplomat in Brussels:

At the highest level of our political leadership, we are convinced that climate change is actually happening and that we need to take action, because it is not some natural phenomenon. It is man-made, directly related to our fossil fuel economy. We need to do something to curb the current upward trend of climate change. We have to stick to the 2 degrees, because that is the temperature rise that is considered scientifically sound. [...] It is also related to a sense of responsibility, as the current amount of greenhouse gases in the atmosphere was basically caused by the economic development in the West. And hence the first responsibility is to act as the Western world to curb those trends (Author's interview, Permanent Representation of a Member State to the EU official, January 7, 2010).

Unlike in the US, the EU's top political leadership is agreed on the science behind climate change and the urgent need to reduce emissions.<sup>51</sup> The EU frequently

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<sup>51</sup> The only exception that confirms this rule is Czech president Vaclav Klaus.

references the IPCC's publications as a justification for its domestic and foreign policies on climate change. The mitigation targets of 25-40% for industrialized states as a group, and a 15-30% deviation from a baseline scenario for emerging economies as a group, are "in accordance with the findings by the IPCC in its [Fourth Assessment Report] and more recent studies" (Council of the EU, 2009, 2).

In addition to acceptance of the scientific evidence for climate change, there is also a recognition of one of the leading principles of the UNFCCC's guiding principles, namely the West's 'historical responsibility' or – in the words of the UNFCCC's preamble – "the largest share of historical and current global emissions of greenhouse gases has originated in developed countries". In its original proposal for the Climate and Energy Package, the European Commission (2007, 9) clearly recognized that "[d]eveloped countries are responsible for 75% of the current accumulation of industrial GHG in the atmosphere and 51%, if deforestation (largely in developing countries) is included". In a joint article, published ahead of the 2009 G-8 summit in L'Aquila, Italy, Commission president Barroso and Swedish EU president Reinfeld recognized that "as the largest contributors to past emissions, we of course agree that the developed countries have a special responsibility to take the lead", while simultaneously emphasizing that action by the EU alone will be insufficient and that emerging economies must also join in the effort (Barroso & Reinfeld, 2009). These first two factors – scientific evidence and historical responsibility – seem to support the idea that the main drivers behind the EU's climate policy are environmental in nature and that a global mitigation norm has been at the centre of the EU's political discourse on climate change since the beginning of the negotiations on its Climate and Energy Package.

A second climate-related motivation for the EU to set ambitious mitigation targets is the growing understanding of the potential impacts of climate change. Lord Stern's report commissioned by the UK government helped policy-makers to understand that the costs of inaction on climate change will far outweigh the costs of early action. In other words, governments that do not price carbon or invest in renewable energy sources *now* will nonetheless encounter economic costs in the future. The Stern Review has become a standard argument to justify EU's early action on climate change (Stern, 2007). Commission president Barroso (2008) put it as follows:

Taking action is not cost free, although we think we can limit the cost of our proposals to around 0.5% of Gross Domestic Product. But the report by Nick Stern [...] shows that the cost of inaction is at least ten times that, and could even approach 20% of Gross Domestic Product. The longer we delay, the higher the costs of adaptation and mitigation.

This argument has become widely shared among EU Member States. During interviews with the author in January 2010, diplomats from a variety of Member States unequivocally supported this argument. While this justification for the EU's mitigation efforts is still concerned with (the impacts of) climate change, the attention to the *economic* costs of lack of action in terms of Gross Domestic Product losses cannot be categorized as a 'pure' environmental concern. Rather, the Stern report fits within a broader political discourse about the need for continued economic growth of the world's and the EU's economy.

#### III.4.2. A low-carbon transition as a 'first-mover-advantage' for the European Union's economic competitiveness

Rather than focusing on the long-term economic impacts of climate change, more recent developments have pushed EU policy-makers to frame the climate challenge more positively in terms that focus on the short to medium term economic benefits of ambitious climate policies. A high degree of consensus has developed among different

EU institutions and EU Member States that it makes good economical sense for the EU to be a 'first-mover' in tackling emissions. These economy-inspired motivations for taking on a leadership role in cutting Europe's emissions are twofold. First of all, there is a growing realisation that European companies have developed considerable expertise in developing and applying renewable energy technologies, compared to their North-American or Asian competitors. Secondly, European policy-makers have come to understand that the era of cheap and easily accessible energy is over. As a result, combining the pursuit of energy efficiency with a diversification of Europe's energy mix helps the EU's competitiveness. One Commission official in DG Environment put it, as follows:

There is also a growing awareness of the opportunities that a low-carbon future brings to the economy, especially in Europe where individual Member States invest significantly in new energy sources and energy efficiency and where you have the economy as a whole that is steered in a high-tech, service-based direction. There is a tremendous incentive to look for new areas where you can be more competitive and e.g. energy efficiency is such an area (Author's interview, European Commission DG Environment official, January 8, 2010).

Governments within the EU are increasingly looking to support businesses in new sectors, like the renewable energy sector, where they can take the lead in exporting their products, technologies and services to other countries.

The 'green economy' argument has gained traction among some of the most powerful actors in Brussels. In that respect, the European Commission plays a central role. The Commission is widely documented to be a policy entrepreneur pushing for ambitious mitigation targets for the EU (Schreurs & Tiberghien, 2007, 33-35; Flåm, 2009; Skæseth & Wettestad, 2010b). In the context the current 'Europe 2020' strategy<sup>52</sup>, the European

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<sup>52</sup> The Lisbon Strategy aimed to make the EU "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion" by 2010 (European Council, 2000). The Europe 2020 is the follow-up to the Lisbon Strategy.

Commission (2010c, 3) proposed for Europe to “come out stronger from the crisis and turn the EU into a smart, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion”. One of the three main priorities is “Sustainable growth: promoting a more resource efficient, greener and more competitive economy”. One of the Commission’s “flagship initiatives” is called “Resource efficient Europe”, which seeks to “decouple economic growth from the use of resources, support the shift towards a low carbon economy, increase the use of renewable energy sources, modernise our transport sector and promote energy efficiency” (European Commission, 2010c, 4).

In its Communication on the potential move from a 20 to a 30 percent reduction target, the Commission (2010a, 4) repeats its mantra that the green economy can bring considerable economic benefits:

There is now a widespread consensus that the development of resource-efficient and green technologies will be a major driver of growth. As countries worldwide sought to boost their economies in the crisis through stimulus packages, there was a clear pattern of investment being directed towards infrastructure for less polluting transport modes, such as public transport, intelligent traffic management systems (ITS), low-carbon energy production, smart electricity grids and clean transport and energy-related R&D. Signs of the transition towards a low carbon economy are emerging across the world, with countries attracted to the greener option also because of its potential to create large numbers of new jobs.

Moreover, there is a realisation in the EU that the belief in the benefits of greening one’s economy are increasingly catching on elsewhere, impacting the EU’s first-mover advantage. The Commission singled out the renewed ambition from the Obama administration in the area of renewable energy, as well as the increasing presence of Chinese and Indian companies in the renewables sector.

Within the European Commission, this idea is widely shared beyond DG Environment and its Commissioner. DG Enterprise and Industry (2010) established the Lead Market

Initiative, which aims to lower barriers to bring innovative products or services onto the market using a variety of policy tools such as standardisation, legislation, public procurement, pilot projects, research and so on. Of the six Lead Markets identified, four can be considered eco-industries: Sustainable construction, Recycling, Bio-based products and Renewable energies. European Commission DG Research (2010) and its Seventh Framework Programme, with its total budget of 32.5 billion Euro, also dedicates considerable resources to research in the thematic areas of 'Energy' (2.35 billion Euro) and 'Environment (including Climate Change)' (1.89 billion Euro):

Strengthening the EU position in world markets for environmental technologies will contribute to sustainable consumption, production, delivering sustainable growth through business opportunities and improved competitiveness, while protecting our cultural and natural heritage.

Research spending on these two areas only accounts for 10% of the total spending under the 7<sup>th</sup> Framework programme and is considerably smaller than spending on health research (6.1 billion Euro) or Information and Communication Technologies (9.05 billion Euro). However, some of the research in areas such as agriculture and transport (e.g. "eco-efficient" agricultural techniques, development of clean and efficient engines and power trains and so on) will also contribute to the strong global position of EU industries in environmental technologies. DG Transport (2009) pursues its goal of 'sustainable transport' by promoting "a shift towards the least polluting and most energy efficient modes of transport" through technical innovation, and DG Employment and Social Affairs promotes 'green jobs' (Euractiv, 2010h).

Another supranational institution, the European Parliament, has consistently supported ambitious climate policies for the EU. Expressing its disappointment with the outcomes of the Copenhagen climate summit, Members of the European Parliament clearly stated

in an early 2010 resolution that this setback is no excuse for lowering the EU's ambitions. The European Parliament stated:

Considers that delay in finding international agreement is not a justification for postponing further EU policies to achieve the already legally binding commitment to reduce our emissions by 20% by 2020; reiterates our desire to move to a 30% reduction; notes also that the initiatives taken within the EU to promote and encourage the green economy, energy security and reduced energy dependency will make it increasingly easy to fulfil a 30% reduction commitment;<sup>53</sup>

This awareness of how Europe's green economy can help its global competitiveness has powerful backers, which have pushed this message onto the EU's agenda. Europe's largest Member State, Germany, has been at the forefront of such efforts. Since the 1980s, successive German governments have developed "a high level of overall institutional, informational-cognitive, technological, and scientific capacities" to mitigate greenhouse gas emissions. The German Ministry of the Environment has been able to drive home a message of "environmental industrial transformation and innovation" (Weidner & Mez, 2008, 356). Germany's progressive stance on climate-related matters has benefited from the lessons learned in dealing with air pollution, which helped to demonstrate that

even very demanding and costly measures to curb air pollution did not have the detrimental economic effects as were claimed by industry and the utility sector and their supporters in government, scientific institutions and trade unions. On the contrary, there was much evidence that the strict air pollution control policy favoured employment, technological innovation, and generally a modernization of industrial branches involved (Weidner & Mez, 2008, 360).

Germany's experience with environmental policies to address air pollution informed Germany's understanding that ambitious mitigation targets can be a win-win strategy for both the environment, as well as the economy.

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<sup>53</sup> Resolution P7\_TA(2010)0019 of the European Parliament of 10 February 2010 on the outcome of the Copenhagen Conference on Climate Change (COP 15) (Official Journal C341 December 16, 2010, pp. E/25-E28).

Germany was also forced to consider alternative energy sources, such as renewable energy, because neither coal nor nuclear energy were viable options to deal with air pollution and greenhouse gas emissions. Coal was heavily subsidized after the Second World War in order to compete with cheaper fuels, such as oil and gas. And after the oil crisis in the early 1970s, spikes in the price of oil led to a focus on greater energy conservation and efficiency. Expanding nuclear power as an alternative energy source could have been an alternative, but a strong anti-nuclear movement in Germany and the Chernobyl disaster in Ukraine in 1986 closed off this option (Weidner & Mez, 2008, 368). This conundrum led Germany to be “squeezed into a situation” to consider renewable energy as a real alternative, as opposed to a marginal role for renewables in the overall energy mix (Author’s interview, Permanent Representation of Germany to the EU, January 11, 2010). Moreover, German utility giants have also started to view the emission intensity of their operations as problematic and renewable energy sources as a business opportunity.<sup>54</sup>

Germany’s push for a common European approach to the climate question has been backed by the “indispensable awkward partner”, the UK, which is not traditionally leading the call for more EU-level legislation (Cass, 2007, 63). Under pressure from active civil society campaigns and with considerable potential for off-shore wind power, the Labour

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<sup>54</sup> The two largest emitters of CO<sub>2</sub>, covered by the ETS, are German utility companies E.ON and RWE (Coelho, 2010b). E.ON (2010) now aspires to an energy portfolio that reduced its CO<sub>2</sub> emissions by at least 50 percent compared with 1990 by the year 2030. According to E.ON, “this makes real financial sense, as this way we will be much less affected by the rising CO<sub>2</sub> prices”. More nuclear energy, coal with carbon capture, renewables and supercritical coal and gas power plants should help to achieve this challenge for E.ON. Similarly, RWE – Europe’s largest single emitter - stated that “[l]owering the carbon intensity of our generation portfolio is one of the cornerstones of our corporate strategy” in its Corporate Social Responsibility report. RWE hopes to achieve this through “climate-friendly coal- and gas-fired power stations, on doubling our renewables-based generation capacity, stepping up our international oil and gas production and expanding and modernising our electricity and gas grids” (RWE, 2009).

government under Prime Minister Gordon Brown, committed in the 2008 Climate Change Act to legally binding targets of a reduction in emissions of at least 34% by 2020 and an 80% emission reduction by 2050, compared to 1990 levels (United Kingdom Department of Energy and Climate Change, 2009). The previous Labour government had commissioned the Stern report, focusing on the costs of inaction on climate change, and drafted a Low Carbon Transition Plan for the UK, setting a wide range of objectives to be met by 2020. Under the EU's Renewable Energy Directive, Labour also committed the UK to increase the share of renewable energy in final energy consumption by more than tenfold, from 1.3% in 2005 to 15% in 2020. This interest in the benefits of reducing the UK's emissions has not changed under PM David Cameron's Conservative Party plus Liberal Democrats coalition, which committed the UK government to reduce greenhouse gas emissions from government operations by 10% in the first 12 months of his government. For example, Chris Huhne, the Energy and Climate Change Secretary of the Cameron government, stated in reaction to the cost-benefit analysis of the European Commission, that the UK government would "push for the EU to demonstrate leadership by supporting an increase in the EU emissions reduction target to 30% by 2020" (Adam & Traynor, 2010). Both Germany and the UK are in favour of a move to a 30 per cent emission cut, regardless of climate policy developments in other regions of the world (Garside, 2010b).

Franco-German cooperation, which has been widely recognized as the 'engine' of the European integration process, has been less relevant for the EU's ambitious climate targets. However, France has not mounted much opposition, as 80% of its energy comes from nuclear power, and French per capita emissions are among the lowest of advanced industrialized economies (European Commission DG Energy, 2007c). In the face of climate change and increased concerns about peak oil and energy security,

civilian uses of nuclear energy have again attracted attention as one of the ways for nations to kill two birds with one stone. French nuclear companies such as Areva and Electricité de France stand to benefit from this renewed worldwide interest in nuclear energy.

Yet, President Nicolas Sarkozy's government has not limited its climate policy to nuclear energy alone. After his election in 2007, the new centre-right President Sarkozy established a new Ministry for Ecology, Energy and Sustainable Development and the Seas, in charge of Green Technologies and Climate Negotiations, which is headed by the Minister of State Jean-Louis Borloo. His Ministry launched a multi-stakeholder consultation, called "le Grenelle Environnement" (2009), which came up with a series of proposals to set the French economy on a low-carbon trajectory and which were approved by the French Senate in August 2009. France is now legally committed to reducing its emissions by 75% in 2050. In 2010, the French government decided to increase French capabilities in the renewable energy sector. In particular, the French government sped up the development of wind and wave energy by selecting a dozen sites for offshore wind parks. It has set the objective of a total wind power capacity of 6000 MW by 2020 in its multi-annual power generation programme. This Ministry will be soliciting calls for proposals with the explicit aim to develop a new job-creating, green industry, which it hopes, will mobilise local industrial networks and infrastructure (Borloo, 2010). Despite his conservative image, President Nicolas Sarkozy has repeatedly rejected an opposition between economy and ecology, insisting that the current model of

economic growth is outdated and that massive investments will be necessary to create tomorrow's growth.<sup>55</sup>

While the 1995 'northern' accession of Sweden, Finland and Austria is often credited for the EU's increased interest in environmental protection, the traditional North-South divide does not apply with regard to climate policies. Spain, inspired by Germany's success, introduced feed-in tariffs for renewable energy sources in the early 1990s and has jumpstarted a domestic renewable energy sector.<sup>56</sup> It should be noted that the combination of increased demand for energy during Spain's years of economic boom with its 75% reliance on imports (in 2004) led to increased concerns about its energy security. Secondly, the demand for active industrial and employment policies – as pursued by Spain's regional authorities like Navarre's – was another motivating factor for the development of renewable energy sources. In Spain, "the significant employment effects of [Renewable Energy Sources for electricity production] should not be neglected", having created more than 250,000 quality and high-skilled jobs (del Rio, 2009, 128). To sum up, "*reaching an energy capacity able to facilitate the levels of economic development comparable with those of the wealthiest EU societies*" was the main driver for Spain's increasing moving away from fossil fuels; climate change and other environmental issues were secondary concerns (Villot, 1997, 153 quoted in Eikeland & Saeverud, 2007, 29 [emphasis in original]). Now, Spain is home to some of the world's largest wind power companies (such as Gamesa Eólica) and is also a world

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<sup>55</sup> At the start of 2008, President Sarkozy established a Commission on the Measurement of Economic Performance and Social Progress (2009) – chaired by Professor Joseph E. Stiglitz – in order to "identify the limits of Gross Domestic Product as an indicator of economic performance and social progress" and "to consider additional information required for the production of a more relevant picture".

<sup>56</sup> Feed-in tariffs oblige grid operators to buy renewable electricity at a higher price for an extended period of 10-20 years in order to enable technologies such as solar and wind to compete with fossil fuels or nuclear energy. These tariffs are gradually reduced as technological development and effects of scale lead to lower production costs.

leader in solar power, housing some the world's largest solar thermal and photovoltaic plants. The renewable energy industry has also become a major exporting industry for Spain. In a way, renewable energy is a solution in search of a problem like climate change. Its development preceded the surge of concerns about climate change. Another southern Member State, Portugal, also gave itself "a Clean-Energy Makeover" due to similar concerns about energy dependence as in Spain (Rosenthal, 2010).

Europe's trade unions, with their traditional base of supporters in the mining and petrochemical industries, now also see emission reductions as a necessity. For example, the European Union Trade Union Confederation has joined environmental and civil society organisations in the 'Spring Alliance'. European trade unions have accepted that major restructuring of existing industries will happen "due to societal and environmental demands", while environmental organisations have in return supported the demand from union leaders for "a just transition framework towards quality jobs for all is needed" for the workforce in these industries in order to "ensure a socially sustainable outcome of all these changes" (Spring Alliance, 2009, 21). Key emerging sectors identified in the manifesto of the 'Spring Alliance' are "transport, housing, social, health, care services, as well as 'energy savings' services that provide energy advice and investment to reduce energy consumption [...]" (Spring Alliance, 2009, 21).

The strength of support for the 'green economy' as a driver for ambitious EU climate policies has been evident since the start of the economic crisis in late 2008, and despite the inability of the Copenhagen climate summit to agree on an international climate treaty and the lack of progress on a cap-and-trade system in the US. Despite this adverse political and economic climate, European officials have not caved in to pressure to adjust the EU's unilateral commitment of a 20% reduction by 2020. Rather, European

leaders, such as former Environment Commissioner Stavros Dimas, have insisted that committing to ambitious, science-based mitigation targets will demonstrate that tackling the climate challenge and recovering from the economic crisis go hand in hand:

The current economic crisis, rather than being a disincentive for action on climate, is also, therefore, a further reason for action. It is precisely at a time of recession that we need to consider efficiencies in our consumption and production. Not only is a shift to a low carbon economy essential if we are to combat climate change but it also makes good economic sense to improve our energy efficiency and increase our energy security by reducing oil and gas imports. This is why our climate goals are not only supported by ministers of the environment but also by finance and economics ministers and by many business organisations (Dimas, 2008). In contrast to the US, where pricing carbon is seen as a brake on economic growth and where special interests have held back feed-in tariffs for renewable energy<sup>57</sup>, European policy-makers have increasingly come to believe that smart regulation and taxation can aid Europe's competitiveness. Spain and Germany, which introduced feed-in tariffs in the 1990s, are upheld as the quintessential examples of how such 'smart' subsidies can generate economic growth and jobs. A joint op-ed, published in the *Financial Times*, of the environment ministers Chris Huhne, Norbert Röttgen and Jean-Louis Borloo from the UK, Germany and France respectively, demonstrates this:

The current target of a 20 per cent reduction now seems insufficient to drive the low-carbon transition. The recession by itself has cut emissions in the EU's traded sector by 11 per cent from pre-crisis levels. Partly as a result, the price of carbon is far too low to stimulate significant investment in green jobs and technologies. If we stick to a 20 per cent cut, Europe is likely to lose the race to compete in the low-carbon world to countries such as China, Japan or the US – all of which are looking to create a more attractive environment for low-carbon investment (Huhne et alia, 2010).

Within the EU, a clear shift has taken place, away from a trade-off between the environment and the economy, "towards a synergistic relationship where economic progress cannot be achieved without environmental protection" (Lenschow & Sprungk,

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<sup>57</sup> A feed-in tariff guarantees renewable energy producers a fixed price for the energy that they supply to the grid, which is higher than the price for non-renewable energy sources. These higher prices are intended to compensate companies in the renewables sector for the higher costs of renewable energy production and guarantee them a degree of certainty about the future price of renewable energy, which can help to promote long-term investments in the renewables sector. Typically, such feed-in tariffs are periodically reviewed, as the production costs of e.g. photovoltaic panels decrease as the scale of production increases.

2010, 145). Furthermore, environmental policies in the wake of the EU's dissatisfaction with the Copenhagen Accord and a deepening economic crisis in Europe during the first half of 2010, are viewed as the driver of a next generation of economic growth. Commission President Jose-Manuel Barroso (2008) delivered in 2008 a speech on "Europe's climate opportunity", referring to an annual turnover of EURO 20 billion and 300,000 jobs in the European renewable sector.

In response to the start of the global economic crisis in 2008, the European Commission also launched its Recovery Plan, its version of a stimulus package amounting to EURO 200 billion that strengthened ongoing efforts by the Member States. Along with "short-term measures to boost demand, save jobs and help restore confidence", the Commission also wanted to contribute to "yield higher growth and sustainable prosperity in the longer-term" (European Commission, 2008a). The latter was to be achieved by making smart investments, which included elements of a green stimulus. Tackling climate change was again presented not only as necessary, but as a quintessential element of Europe's plans for economic recovery:

The Recovery Plan aims to boost efforts to tackle climate change while creating much-needed jobs at the same time, through for example strategic investment in energy efficient buildings and technologies (European Commission, 2008a).

The Commission's instrument of choice was the Cohesion Policy and the European Regional Development Fund. Since 2009, all Member States – instead of only the new Member States – can access these funds for investing in energy efficiency improvement and on renewable energy in their existing social housing stock.<sup>58</sup>

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<sup>58</sup> Regulation (EC) No 397/2009 of the European Parliament and the Council of 6 May 2009 amending Regulation (EC) No 1080/2006 on the European Regional Development Fund as regards the eligibility of energy efficiency and renewable energy investments in housing (Official Journal L126 May 21, 2009, p. 3-4).

Part of the green stimulus in the Commission's Recovery Plan was the European Energy Programme for Recovery, whose budget amounted to EURO 4 billion. This EU Programme intended to "provide new stimulus to the European economy and increase Union spending in strategic sectors. Investments in energy projects were considered an important tool to support the economic recovery" (European Commission, 2010e). Most of the money (60%) will be spent on "the urgent task of modernising, expanding, renewing and inter-connecting Europe's energy infrastructure". The rest of the money will be spent on Carbon Capture and Storage (CCS) projects (26%) and offshore wind projects (14%) (European Commission, 2009a).

Despite wide acceptance in the EU that emission reductions can create economic win-win situations in terms of, e.g. a thriving wind power sector or reduced energy dependence, some powerful actors within the EU are not enthusiastic about the EU's drive towards a low carbon economy. This goes back to the "tensions and complexity found in the EU system [which] severely complicate the EU efforts to act as a normative leader", as was evidenced in the EU's push for the Kyoto Protocol, when "domestic concerns motivated Member State governments while the Commission and other EU actors saw an opportunity to expand the EU influence" (Zito, 2005, 369-370). The EU is engaged in a balancing act between those that stand to profit from climate-friendly policies and those for whom the status quo works:

No matter how convinced we are of the need for action and that the European economy as a whole is likely to win on this, and putting the impacts of climate change in the balance, there will be losers. Those will be the ones that are late in adjusting their economy. And there are specific industry sectors, who by their very nature are energy-intensive and where any type of carbon cost will have an immediate impact on their competitiveness. No matter how much you want to move on this, there are always interests that we can move, but not too much. This is the debate we see in Europe, which is translated in the 20 to 30 [% reduction] discussion, where there are now some countries who call into question the 20% target, in the absence of a deal in Copenhagen. We try to strike

a careful balance between that. We had a demonstration of 10.000 Polish steel workers in Brussels, which called for a stop to European climate policy as it kills jobs. What we try is to project that leadership in a way that is accepted domestically (Author's interview, European Commission DG Environment official, January 8, 2010).

While some of the big Member States (Germany, UK and Spain) have fared very well with the development of their green economies, other Member States are less convinced about the potential of renewable energy for their national energy mix or increased numbers of green jobs. These 'laggard states' are concerned that the EU is not an island, and that ambitious climate policies in Europe will first and foremost hurt the EU's economic competitiveness and start a process of 'carbon leakage'. Moreover, ambitious mitigation targets for the EU will not significantly contribute to stopping 'dangerous' climate change without the support of other major emitters. For example, Fatih Birol, chief economist at the International Energy Agency, estimates that the gains from a tougher EU reduction target "would roughly equal only two weeks of China's emissions" (Euractiv, 2010d).

Poland is one the EU Member States that seeks to tone down the ambition of the EU's mitigation targets. There has been extensive media coverage of these Polish attempts and how, for example, reports of the Polish Electricity Association directly influenced the negotiation stance of the Polish government in Brussels (Skodvin *et alia*, 2010, 864). This lack of support in Poland for the EU's leadership role is linked to the Polish domestic energy mix, which relies on coal, one of the most CO<sub>2</sub> intensive sources of energy, for 92% of its electricity production (European Commission DG Energy, 2007b). Its 2009 policy statement "The Polish Energy Policy until 2030" continues to put great emphasis on the fact that Poland is one of the least import dependent countries in the EU: "Poland's energy security will be based on domestic fuel and energy resources,

especially hard coal and lignite” (Ministry of Economy Poland, 2009). Moreover, Poland still exports large quantities of hard coal to other EU Member States (European Commission DG Energy, 2007b). Despite a process of privatisation underway in the Polish energy sector, the Polish government continues to have a stake in four major utility companies (ENEA, Energa, PGE and Tauron), which are vertically integrated utility companies involved in mining, power plant management and distribution of electricity. Despite this privatisation, the Polish energy sector “still profits from strong connections between owners, managers and trade unions”, which is a situation inherited from its Communist past (Bokwa, 2007, 123).

Countries like Lithuania are in a peculiar position, since acceding to the EU in 2004. In the pre-accession negotiations, the EU had insisted that Lithuania phase out the use of two nuclear reactors that supplied about 80% of Lithuania’s domestic energy production, because the Ignalina power plants used similar reactors as those that were involved in the Chernobyl disaster in Ukraine. Whereas Lithuania used to be a net exporter of electricity to neighbouring countries thanks to its nuclear plants, it now relies on gas for 50% of its power, with Russia as its one and only supplier, and is poorly integrated in the wider EU energy market (European Commission DG Energy, 2007a). Several EU initiatives to remedy Lithuania’s lack of energy security are underway. One is the Nord Stream pipeline, which will ship gas from Russia to Germany via the Baltic Sea. Also, the ‘Baltic Energy Market Interconnection Plan’ was launched in 2008, which aims to fully integrate the Baltic States into the European energy market by strengthening their interconnections with neighbouring EU Member States, in particular all Nordic countries. This reliance on Russia as Lithuania’s prime energy supplier has two effects: It pushes Lithuania, on the one hand, to be wary of imposing ambitious mitigation targets as this could potentially further increase its reliance on Russia, but this reliance on Russia has

also spurred Lithuania to agree to a relatively high target of a share of 23% of its final energy consumption from renewable sources by 2020, compared to 15% in 2005.<sup>59</sup>

Important industry associations, representing a large share of both the European economy and a large share of overall EU emissions, have expressed strong concerns about discussions to move the EU from a minus 20% to a minus 30% emission reduction by 2020. The Director General of BUSINESSEUROPE agreed that the low-carbon agenda should move forward, but disagreed with the emphasis on economy-wide mitigation targets: “Rather than focusing the discussion on new emission reduction targets the Commission should work on encouraging the development and deployment of low-carbon technologies” and on “policy measures which directly encourage investments in energy efficiency (especially in the household sector) in modern energy infrastructure” (BUSINESSEUROPE, 2010). Along the same lines, the Alliance for a Competitive European Industry (2010), an alliance of umbrella organisations of European businesses from different sectors, also recognizes the links between Europe’s economic and environmental challenges and aims “to promote the competitiveness of European industry on a global scale and to help address Europe’s radical transformation towards a sustainable and low-carbon future”. This Alliance sees the potential for the EU and its businesses to be a leader in the green economy: “Despite being a smaller part of a bigger world, European industry has the ambition to be a global leader in sustainable technologies and to play a leading role in the emerging ‘green economy’” (Alliance for a Competitive European Industry, 2010). However, its manifesto, entitled “Shifting Gears for a New EU Industrial Partnership”, focuses on R&D expenditure, open markets and

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<sup>59</sup> Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC on the promotion and the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003.30/EC (Official Journal L140 June 5, 2009, p. 46).

skilled workers. Nowhere does it mention the need for the EU to set ambitious emission reduction targets to achieve this objective. In *Carbon Market Europe*, a senior adviser for Business Europe, Franz Folker (2010), insisted that the EU should steer away from its obsession “with increasing numerical emission reduction targets”, pursuing instead “a new policy approach to tackling the low-carbon challenge by fully integrating European policies for climate, energy and industry”. For Folker (2010),

Europe needs a strong and diversified industrial base. It is not helpful to divide industry artificially into “green” and other sectors. Wind turbines need cement and fibreglass. Energy-efficient houses need glass and chemical products. And so on.

This speaks to a perception in parts of the business community that the EU favours some green sectors, such as renewable energy produces, at the expense of other industries, which make significant contributions to the EU’s economy. Within the Council, European businesses have been able to consistently rely on a Member State like Italy to voice these concerns during the negotiations on the 2008 Climate and Energy Package and the discussion after Copenhagen about increasing the EU’s mitigation target from 20% to 30% (Euractiv, 2008, Euractiv, 2010g, see also Sandbag 2010b).

Given that the energy industry in Europe accounts for 40% of the EU’s emissions, it has cautioned the EU about trying to be a global leader on climate change. For example, EURELECTRIC (2010), the European association of the electricity industry, recognizes that “the current economic and financial situation has, and probably will continue to reduce the emissions gap between 2020 projections and the EU target” and that “rapid progress is being made on the initial deployment of new renewables”. However, EURELECTRIC also insists that “the necessary transmission and distribution investments [for renewable energy] will not be deployed on a significant scale before 2025 at the earliest”. So, the electricity sector lobbies for delayed targets (e.g. 2025-

2030) to allow the industry more time to adapt and better plan this transition. EURACOAL, the umbrella organisation of the European coal and lignite industries, also argues against stringent targets, and has emphasized the important role of coal that coal can play in securing Europe's energy supply. One of its key messages to EU-level politicians is that coal represents "approximately 80% of EU reserves of fossil fuel" (EURACOAL, 2010).

It should be noted that European business organisations – in contrast to many of their American counterparts – do recognize that climate change is a serious global environmental, economic and social challenge, which requires urgent action. There is no denial of the scientific evidence for climate change and the need to reduce emissions. In a joint Declaration, the CEOs of European electricity companies committed their industry "to achieve a carbon-neutral power supply by the middle of this century" (EURELECTRIC, 2009). To summarize, industry supports a leadership role for the EU (as well as for European industry) on climate change, but disagrees about the instruments and the pace at which the EU seeks to achieve these targets. Industry does not care for ambitious mitigation targets, but favours R&D, investments in energy infrastructure (transmissions lines) and investments in energy efficiency as better instruments. In particular, European businesses organizations feel that the EU should not move ahead unilaterally without a global agreement:

[t]he EU must not increase in any way its current unilateral 20% carbon reduction requirement and the 100% free allocation for sectors at risk of carbon leakage established in the context of the EU Emission Trading Scheme must remain in place. The US Congress proposal to reduce US emissions by 17% by 2020 compared to their 2005 levels only represents a 3% reduction from 1990 green gas emissions. Therefore, it cannot be considered an "equivalent" effort justifying an EU move to a 30% reduction (BUSINESSEUROPE, 2009).

In other words, business organisations fear that the transition costs of moving to a low-carbon economy and the risk of so-called carbon leakage will negatively impact the competitiveness of European industry.

Within the EU, all actors – including energy intensive industries – recognize the climate challenge and the subsequent need to move to a low-carbon or greener economy. The disagreements between the various actors are mainly centred on the economic benefits of a “first-mover advantage”. One diplomat put it succinctly:

There is a cost [attached to EU leadership], but the cost is an investment looking in the medium to long term. The cost implies a passage to lower carbon or greener economy, which represents an investment for the European economy as a whole, provided that the competitiveness of the industrial sector is taken in due consideration (Author’s interview, Permanent Representation of Italy to the EU, January 26, 2010).

Actors, like the European Commission, MEPs, environmental NGOs and renewable energy industries view ambitious mitigation targets not only as necessary to tackle climate change, but as beneficial for the competitiveness of the EU. Other actors, such as Member States with a coal-dominated national energy mix or carbon-intensive industries that face a risk of carbon leakage, perceive the advantages of EU leadership less positively. The latter emphasize the need for a ‘comparable effort’ of other major emitters.

In the wake of the economic crisis, emissions from industrial installations covered by the EU’s carbon trading scheme fell by 11% in 2009 (Euractiv, 2010e). Following this considerable drop in emissions and ongoing economic troubles in Europe, environmental organisations have criticized the EU’s 20% target for its lack of ambition. In particular, the EU’s cap-and-trade system, the ETS, seems unable to respond to the reduced demand due to high energy prices, as well as the emission reductions because

of the economic crisis. Sandbag (2010a) points out the ETS might will likely fail to achieve its objective of reducing emissions:

With emissions now below the level of the cap, the cap has become a trap – guaranteeing high level of emissions into the future rather than working to deliver reductions. There is currently no structural design feature that allows for a considered reaction to these circumstances and this is a major failing. The environmental integrity of the scheme is now reliant on political decisions to increase future targets provisionally set for it in 2008.

The European Parliament also expressed support for the EU to move unilaterally to a 30% reduction:

Recognises that the estimated cost of the EU achieving a 30% cut in 1990 emissions by 2020 is now less than the estimated cost of achieving a 20% cut when that was agreed, and calls on the Commission, therefore, to bring forward a proposal for the EU to raise its ambition and unilaterally to set a 2020 reduction target greater than 20%;<sup>60</sup>

After taking office, European Commissioner for Climate Policy Connie Hedegaard published a Communication, entitled “Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage”. Apart from the EU’s policy drive to reduce emissions, the Communication admits that the high energy prices in 2007 and 2008 and the financial and economic crisis that hit at the end of 2008 have helped the EU to cut emissions in 2009 by 11.6% compared to 2008. Whereas “the costs of reaching the target were estimated as at least €70 billion per annum in the year 2020”, the recession that started in 2008 lowered the price tag to EURO 48 billion or “30% less than expected 2 years ago” (European Commission, 2010a, 3). The Commission estimates the cost of the 30% reduction target to be an increase of €11 billion compared to the absolute costs of the climate and energy package in 2020 as projected in 2008. In other words, the total cost of a 30% reduction is now estimated at €81 billion. The costs for moving to a higher target would be mainly

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<sup>60</sup> Resolution P7\_TA(2010)0019 of the European Parliament of 10 February 2010 on the outcome of the Copenhagen Conference on Climate Change (COP 15) (Official Journal C341 December 16, 2010, pp. E/25-E28)

borne by the electricity sector and by the poorer Member States. Hence, “[a] potential move to 30% would require a decision on a specific mix of options on how to share the additional reductions. A detailed analysis of impacts at Member State level and economic sectors can only be made on the basis of specific options” (European Commission 2010b, 9).

Despite demonstrating that a 10% increase of the EU's mitigation target costs 30% less than estimated in 2008, EURO 48 billion per year instead of EURO 70 billion, the new Climate Commissioner Hedegaard did not support such unilateral EU action, “saying that the shift would remain conditional on progress towards a new international climate treaty” (Euractiv, 2010m). Following the publication of the Commission's document, the German and French ministers of Industry made a joint public statement, which states that the EU has taken “an ambitious commitment to reduce our greenhouse gas emissions by 20% by 2020,” but that Paris and Berlin would back a move to -30% only if other nations made “comparable commitments” (Euractiv, 2010o). The EU sticks to its original position and keeps a possible increase to 30% as a crucial bargaining chip for the end game of the climate negotiations. This was the stated policy of the EU ahead of Copenhagen and this stance has not changed, even though its offer failed to impress any of the other large emitters during the COP15. It is the EU's hope – environmentalists would say wishful thinking – that its conditional offer will get other states to make their mitigation targets more ambitious.

### **III.5. Conclusion**

Before exploring how the EU and its foreign policy promote a global mitigation norm, I explored the strength of this norm within the EU and its influence on the EU's own

climate and energy policies, using the literature on Normative Power Europe. By engaging with this framework and its critiques, we can draw some conclusions about the EU's role as a norm leader and whether the EU is normatively to behave normatively in discussions about global norms. There are limits, when conceptualising the EU as a Normative Power. While this concept may be applicable to the EU's role in the promotion of human rights, the EU's attachment to environmental norms is more equivocal. Within the EU, there is only qualified support for a global mitigation norm. For example, ambitious mitigation targets are only possible, if they do not detract from other economy-focused priorities such as global competitiveness, balanced budgets, energy security, etc.

Ian Manners conceded this point that a 'minor' environmental norm such as sustainable development is more contested. By focusing on the EU's political-legal constitution, this chapter identified many opportunities for norm resisters in the EU to temper its ambitions. I was able to do so by complementing the Normative Power framework with an analysis of the intergovernmental bargaining within the EU and the role of some Member States as norm resisters. The requirement to decide on the Climate and Energy Package by consensus – because it cuts across so many sensitive policy areas including energy – as well as the recognition in the Lisbon Treaty of the need for a 'spirit of solidarity', gave norm resisters a powerful position to negotiate with the other actors in the EU in support of the EU's leadership ambitions. For example, the accession of new Eastern European Member States put a brake on the EU's normative predisposition to pursue a global mitigation norm. The internal climate politics of the EU have become divided along East/West lines or old vs. new Europe: Eastern European Member States used the politico-legal constitution of the EU to demand recognition for their specific situation, as their economies are still catching up to the West. As economic growth has always been accompanied by rising emissions, the leaders of these states resisted any

agreement that would impose stringent emission reduction targets. So, all elements of the Climate and Energy Package contain compromises that recognize the specific situation of Member States in Eastern Europe and the particular energy-related challenges of Poland and Lithuania.

The success of these norm resisters is somewhat surprising, because the support for ambitious mitigation targets has a wide range of powerful backers within the EU: The European Commission, the European Parliament, the three largest Member States (Germany, France and the United Kingdom), some Member States in Southern Europe (Spain and Portugal), the European trade unions, a growing renewable energy sector and – needless to say – groups of environmental activists. Even European public opinion – to the extent that there is such a thing – supports a more ambitious role for the EU on climate change. A belief in the material benefits of a strong position of the EU on climate change played a significant role. The EU's position on climate change is also informed by the argument in Lord Stern's (2007) Review about the negative economic impacts of climate change and the belief in a 'first-mover advantage' for the EU of transitioning to a low-carbon economy. With regard to the EU's 'first-mover advantage', the belief in the renewable energy sector as a future growth capable of generating 'green jobs' and cutting-edge technological advantage for the EU is widely held to improve the EU's global competitiveness.

However, this chapter demonstrated Fearon and Wendt's (2002) point that demarcating a clear distinction between normative/environmental factors and non-normative/other factors is very challenging. Undoubtedly, a global mitigation norm is widely accepted within the EU and has influenced the EU's decision-making in this area, as is demonstrated for example by the frequent references to science-based mitigation

targets in EU decisions. However, the belief in material gains of a strong stance on reducing emissions played a major role in the EU's 'domestic' decision-making. Developing an exact metric of the impact of a global mitigation norm within the EU is a methodological challenge, if not impossible.

As to the economic argument about the EU's 'first mover advantage' for the EU of a low-carbon economy, this chapter again identified a number of resisters. Eastern European states are less enthusiastic about this idea, than for instance Denmark and Germany. The main lobby group of European businesses, BUSINESSEUROPE, is also not convinced and emphasizes that unilateral European action on climate change – no matter how ambitious – will do little to avoid climate change in the absence of comparable commitments of other advanced industrialized states as well as China. With allies like Italy and Poland, major concessions were made to reduce the cost of ambitious EU-level climate policies for European businesses. Again, a focus on the intergovernmental negotiations shows a long list of compromises (carbon leakage, delayed auctioning of ETS permits and so on) that chip away at the ambition of the EU's mitigation targets. Unsurprisingly, within an economically more diverse EU of 27 Member States, there is no unanimous consensus about the merits of moving its economy in a low-carbon direction. In addition, the financial crisis and the following economic and budgetary crises that the EU currently faces, are a real test for the required "spirit of solidarity", because the 'believers' in a green, low-carbon economy will be required to compensate less economically advanced Member States for the differential impact of the EU's progressive positions on climate change. The 'environment vs. the economy' debate within the EU has moved on, but is not yet over.

This combination of successful norm resistance and the belief in the economic benefits of ambitious mitigation actions do not only call into question Manners' (2002) concept of Normative Power Europe, but also has 'real world' consequences for the EU as an international actor on climate change. Despite the EU's own, internal hesitations about a principled commitment to a global mitigation norm, a wide range of European politicians claimed a leadership role for the EU in multilateral climate change. However, the credibility of the EU's leadership claims was challenged during the Copenhagen climate summit in December 2009, due to the gap between the EU's self-proclaimed leadership on climate change and its less than ambitious internal policies. This undermined the EU's ability to produce a more ambitious outcome for the ongoing negotiations on climate change, an issue to which we turn in the next chapter.

## **Chapter IV: Curb your (own) emissions: Policy coherence and the failure of European Union leadership on climate change**

### **IV.1. Introduction**

Much of the EU's reputation as a global player has been staked on the issue of climate change. Framing the EU as a leader on climate change among European policy-makers is "presented as taken for granted" (Uusi-Rauva, 2010, 77). British Foreign Secretary David Miliband (2008) delivered speeches with titles that demonstrate this ambition, such as "Green Peace: Energy, Europe and The Global Order". European Commissioner for the Environment Stavros Dimas (2008) proclaimed that "EU leadership is [...] a key driver in efforts to reach an international agreement on climate change at the [United Nations] Conference in Copenhagen in December 2009". Playing up this self-proclaimed leadership of the EU, European environmental organisations called on the EU that it is "Time to lead" (2008). Opinion leaders and think tanks within the EU also emphasized that "Europe's soft power should not be sniffed at", pointing to the example of the EU "leading global efforts to construct a post-Kyoto system for tackling climate change" (Grant, 2009, 2). Also outside the EU, the EU's leadership role has been recognized. Former American Vice-President and climate advocate Al Gore visited Brussels in 2007, stating that – in the absence of American action on climate change – "the European Union is absolutely key to helping the world make the changes it must" (Castle, 2007).

In December 2009, the world community came together in Copenhagen to hammer out a new deal on climate change for the period following 2012, when the Kyoto Protocol expires. European politicians were convinced that the EU could lead the world in doing

the right thing on climate change, namely committing to ambitious emission reduction targets. The EU had set a number of objectives, presented as evidence of its leadership: European officials point to the EU's long-standing objective of "limit[ing] the average global temperature increase to less than 2 [degrees Celsius] compared to pre-industrial levels" (European Commission, 2009e, 3-5). For Annex I, or advanced industrialized countries, the EU takes its cue from the Intergovernmental Panel on Climate Change, which requires "emission reductions for developed countries in the range of 25-40% by 2020 and 80-95% by 2050" (European Commission, 2009e, 4). The EU suggested a 30% reduction compared to the 1990 baseline year for all developed countries. For these reductions to help the world stay within the 2 degrees range, developing countries "whose emissions are increasing rapidly and, if not addressed, will outweigh developed country efforts to reduce their [greenhouse gas] emissions" also need to "limit the rise in their [greenhouse gas] emissions through nationally appropriate actions to 15-30% below baseline by 2020" (Council of the EU, 2009).

The results of the Copenhagen summit, the Copenhagen Accord, did not give the EU many reasons to celebrate. The EU was sidelined during the last hours of frantic negotiations, when US President Obama negotiated the final Copenhagen Accord with Indian Prime Minister Singh, Brazilian President Lula da Silva, South Africa President Jacob Zuma and Chinese Premier Wen Jiabao (Rapp *et alia*, 2010). This Accord was presented as a *fait accompli* to the rest of the Conference of Parties in the final chaotic hours of the Copenhagen summit. While the EU's main negotiation partners agreed that "deep cuts in global emissions are required according to the science [...] with a view to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius", other states were hesitant to commit to specific targets in a legally binding multilateral treaty (Conference of the Parties, 2009). Despite the acceptance of

the 2 degrees target, there was little agreement on who should reduce its emissions by how much and by what deadline. The Conference of Parties simply ‘took note’ of the Accord. Almost 140 states, representing 86.76% of global emissions, have made voluntary commitments to build on the Accord (US Climate Action Network, 2010). The Copenhagen Accord invited all industrialized countries to submit mitigation targets and all developing countries to submit mitigation action plans by January 31, 2010. However, the targets that have been submitted to date are not even close to the EU’s objectives for both developed and developing states, and put the atmosphere on a trajectory of increasing GHG concentration levels to about 700ppmv by 2100 and the world to a warming of 3.5 degrees Celsius by that time (Hoehne *et alia*, 2009). By 2020 and with 1990 as baseline year, the US committed to a minus 3.67% target, Canada to a plus 0.25% target<sup>61</sup>, Japan to a minus 25% target and Australia to a target anywhere between minus -3.89% and -24.1%. Commission President Jose-Manuel Barroso (2009) summed it up during the EU’s final press conference in Copenhagen: “I will not hide my disappointment regarding the binding or non-binding nature of a future agreement. In this respect, the text agreed today falls short of our expectations. Quite simply, our level of ambition has not been matched [...]”.

This chapter asks whether other actors within the climate regime perceive the EU’s self-proclaimed leadership role in pushing for a global mitigation norm as credible. This chapter uses the Constructivist literature on norm diffusion and the literature on the role of political leadership in global environmental negotiations as its theoretical framework. Based on this literature, I argue that a high degree of ‘policy coherence’, defined by Lightfoot and Burchell (2005, 88-90) as “coherence between its external commitment

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<sup>61</sup> This is less ambitious than Canada’s 1997 target under the Kyoto Protocol!

and its internal policies” is a key factor for the EU to be an effective leader on climate change. The EU’s policy coherence on climate change is assessed in detail in three areas: the EU’s compliance with its joint target under the Kyoto Protocol, the ambition of its 2020 targets and its reliance on international offsets for meeting these targets. I conclude that there is a widespread perception of a gap between the leadership rhetoric of the EU and the lack of ambition of its internal mitigation targets. This view is shared by environmentalists as well as the EU’ negotiating partners in the UNFCCC framework, and even by key European policy-makers.

#### **IV.2. Theoretical framework**

Norms are of central importance for Constructivist understandings of international politics and Katzenstein (1996, 5) offer a widely cited definition of norms as “collective expectations for the proper behavior of actors with a given identity”. In contrast to mainstream theories of international politics like realism and neoliberal institutionalism, which “assume self-interested and rationally calculating actors, instrumentalism and consequentialism”, Constructivists view human actions, including policy making “as driven by rules of appropriate or exemplary behavior, organized into institutions” (March & Olsen 2004, 2). The appropriateness of rules includes both cognitive and normative components (March & Olsen, 2004, 3). For example, Risse, Ropp and Sikink (1999, 238 and 267-270) empirically demonstrate the power of human rights by showing how alternative explanations, such as Great Power politics or modernisation theory, cannot explain how norms such as human rights constrain the actions of state actors, and that “socialization processes are effective across a strikingly diverse range of regions, countries, socio-economic systems, cultures, and types of political regimes”.

Apart from 'proving' that norms matter (e.g. Katzenstein, 1996; Klotz, 1999), Constructivist scholars have also analysed how the process of norm diffusion takes place (Risse, Ropp & Sikkink, 1999; Finnemore, 2003). Such research demonstrates that "[n]orms do not appear out of thin air; they are actively built by agents [or norm entrepreneurs] having strong notions about appropriate or desirable behaviour in their community" (Finnemore & Sikkink, 1998, 896). For example, Risse Ropp & Sikkink (1999, 268) demonstrate how improvements in the human rights policies of specific states "[were] almost always the result of shaming and lobbying activities by the transnational advocacy networks". Before a norm becomes well-established in international institutions, defining what responsible states should do, a wide range of governmental and non-governmental actors engage in a negotiation process, where state actors can adopt a whole range of positions, ranging from leaders, to laggards, to opportunists (Jordan & Lenschow, 2000; Andresen & Agrawala, 2002; Boerzel, 2005; Skodvin & Andresen, 2006).<sup>62</sup>

Constructivists have paid considerable attention to the role of non-governmental 'norm entrepreneurs' in changing the international understandings of what can be considered to be acceptable behaviour by state actors within their own domestic constituency. The role of norm entrepreneurs or epistemic communities (Haas, 1989, 1992, 2004) has been studied in great detail. As mentioned earlier, the shaming activities of transnational human rights NGOs have proven effective in a wide range of circumstances (Risse, Ropp & Sikkink, 1999). Haas (2004) demonstrates that epistemic communities can be "the transmission belts by which new knowledge is developed and transmitted to decision-makers" provided this knowledge has "the substantive characteristics of usable

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<sup>62</sup> Legro (1997) refers to 'norm robustness', which depends on the specificity, durability and concordance of the norm in question. See section II.2 for an in-depth elaboration of the norm robustness of a global mitigation norm.

knowledge: credibility, legitimacy, and saliency”.

Less attention has focused on state actors as ‘norm leaders’, defined by Finnemore and Sikkink, (1998, 885) as states that have adopted the emerging norm. Finnemore and Sikkink only reserve a role for norm leaders in the second stage of their conceptualisation of a norm’s “life cycle”. There is substantial literature on the question of leadership in global governance (Young, 1991; Underdal, 1994), but it tends to be disconnected from Constructivist research on norms and their diffusion. The leadership literature has demonstrated the importance of leadership in multilateral negotiations, such as the negotiations in the climate change regime of the UNFCCC.

In general, the more complex the negotiation setting (that is, the larger the number of actors and the number and ‘intricacy’ of the issues, the more likely that some actors will emerge as leaders and others as followers [...] and the more critical leadership becomes as a determinant of success (Underdal, 1994, 179-180).

According to Underdal (1994, 191), leadership is a multifaceted phenomenon and can be exercised in different ways, such as coercive or instrumental leadership or leadership through unilateral action and explains through a series of case studies that a combination of these leadership modes is crucial – in the sense of necessary, but not sufficient – to overcoming problems in multilateral negotiations. Gupta and Grubb (2000, 17) reserved a “ clear role for leadership” in the climate regime, “when the principles underlying the regime are still in a process of being articulated” and when the regime is “still under serious threat from those opposed to effective action”. Here, I wish to link this research and the literature on the EU as an international actor to the issue of ‘leadership’ in global governance. The literature on leadership will be able to inform the elaboration of a conceptual framework for the under-developed concept of ‘norm leaders’ and their role in the diffusion of global (in this case, environmental) norms.

The sprawling literature on the EU as an international actor illuminates what influences the EU's effectiveness as an international political actor. Drawing on Constructivism, the work of Bretherton and Vogler (2006, 17) looks at how the EU can be an actor "capable of formulating purposes and making decisions, and thus engaging in some form of purposive action". The EU's foreign policy activities are shaped in part by the notion of 'capability', which emphasizes the EU's internal context as an important variable for the EU's external actions. Capability is defined as "the ability to formulate effective policies and the availability of appropriate policy instruments" (Bretherton & Vogler, 2006, 29-30). For the EU to be 'capable', Bretherton and Vogler assert that the EU must show coherence (i.e. "the level of internal coordination of EU policies") and consistency (i.e. the degree of congruence between the external policies of the Member States and of the EU") (see also Bretherton & Vogler, 2000 and 2008). This coherence between internal and external policies can help the EU to prove "how they themselves have realised this project at home", which will avoid accusations of neo-colonialism, double standards and primarily self-interested strategies (Vogler & Stephan, 2007, 397). For the EU's leadership on environmental issues, "[t]he failure to forge a coherent link between its environmental objectives and trade and live up to its purported 'green' leadership represents one of the enduring problems, or perhaps lost opportunities, of the Union" (Vogler & Stephan, 2007, 409).

The vivid academic debate, following Manners' (2002, 238-239) conceptualisation of the EU as a Normative Power, is of particular relevance for the EU's role as a potential norm leader. Having developed this concept with the EU in mind, Manners defines a Normative Power as an ideological power with "an ability to shape conceptions of 'normal' in International Relations", who is committed "to placing universal norms and principles at the centre of its relations", both internally between Member States as well

as externally in its relations with the world. This concern with the applicability of the norms that are at work both within the EU, and in its relations with the outside world echoes the Bretherton and Vogler's concern with coherence and consistency. Manners (2002, 241) only alludes to the possible scepticism "about the application and indivisibility of such core norms" by the EU, but does not address the potential impact of a lacklustre compliance by the EU with its own core norms for its effectiveness as a Normative Power. Other authors address the problem of contradictions between rhetoric and action, particularly for the EU's effectiveness in promoting environmental norms. Lightfoot and Burchell (2005) use the concept of Normative Power to analyse the EU's leadership role at the 2002 World Summit on Sustainable Development. In their conclusion, the EU's 'policy coherence', defined as "coherence between its external commitment and its internal policies is crucial" is emphasized as "essential to ensure that the EU's pursuit of norms is no longer weakened by its support of policies detrimental for other countries" (Lightfoot and Burchell (2005, 88-90)).<sup>63</sup> Other analyses of the EU's leadership, specifically in environmental matters, have also drawn attention to 'policy coherence'. Early on, Robins (1998) explored the potential of 'greening European foreign policy' suggesting to improve the EU's policy coherence by organising different policies areas around the concept of Sustainable development. Andresen (2007, 459) also identified the gap between the rhetoric, ambitions and vision of the EU and its actions and practical implementation as a challenge for steering events in the context of environmental governance at the level of the UN. Oberthuer and Roche Kelly (2008, 39) credit progress in EU climate policy since the 1990s on "closing the credibility

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<sup>63</sup> The Organisation for Economic Cooperation and Development also developed a definition of policy coherence, focused on the area of development aid: "Policy coherence for development means taking account the needs and interests of developing countries in the evolution of the global economy. [...] The converse, policy *incoherence*, would be actions that reduce current income and growth prospects in developing countries and thus run counter to aid policies that work to develop their competitiveness, i.e. their capacity to capture the benefits of globalization".

gap between international promises and domestic implementation, which has long been the Achilles' heel of EU international leadership". While writing from different theoretical perspectives, authors such as Elgstrom and Smith (2006, 248), Laidi (2008) and Zielonka (2008, 475) and Zito (2005, 372) all identify the value of such policy coherence, as defined by Lightfoot and Burchell (2005).

This widespread interest in the literature in policy coherence for the EU's foreign policy dovetails with Andresen and Agrawala elaboration of directional leadership. For Andresen and Agrawala (2002, 42) "[...] four types of leadership can be identified: intellectual leadership, instrumental leadership, power-based leadership and directional leadership". Policy coherence is closely related to directional leadership, as it is "associated with the setting of a good example or showing the way on how to deal with an issue. Cheap and symbolic action does not qualify as leadership in this sense; some sacrifice has to be made to make it credible [...]". Gupta and Grubb (2000, 21) already explored the directional leadership of the EU in the negotiations on the Kyoto Protocol. For them, this type of leadership has two components: First of all, such leaders provide leadership by example, i.e. "[demonstrating] the feasibility, value and superiority of particular policy solutions" (Parker & Karlsson, 2010, 926). Secondly, such leaders wish to actively convince other actors of the need for action, focusing on "their dissemination internationally". In contrast to instrumental or power-based leadership, "[directional leadership] is a question of directing people by moulding their interests, values and beliefs, rather than coercing or alluring them to do things they would rather not have done" (Malnes, 1995, 93). Cognitive resources are particularly relevant for the power of directional leaders to influence the outcome of international negotiations: "This is the power that goes with convincing ideas, and with skill in presenting one's ideas convincingly. [...] It is typically a question of persuasion [...]" (Malnes, 1995, 96).

However, as Parker and Karlsson (2010, 926-927) point out, the relationship between the credibility of directional leadership and (lack of) implementation remains underdeveloped: For the EU to be recognized as a directional leader, “the realities of the leader’s deeds must match its rhetoric”. European leaders frequently refer to the EU’s role in securing the entry into force of the Kyoto Protocol. Hence, a good starting point to assess the EU’s policy coherence on climate change is the EU’s compliance with the Kyoto targets.

### **IV.3. The European Union’s Compliance with the Kyoto Protocol targets**

Meeting the Kyoto targets would great help along the EU’s ‘policy coherence’ as a norm leader, who adheres to a global mitigation norm. Under the Kyoto Protocol, the EU15 committed as a whole to a reduction of emissions by 8% by 2012 compared to 1990.<sup>64</sup> Under article 4.4 of the Protocol, several Parties can agree to meet these targets jointly. The EU agreed in 1998 to use this possibility and agreed upon an internal ‘burden-sharing’ arrangement or a ‘bubble’ to allow for flexibility in the allocation of reduction targets. Hence, the credibility of the EU in Copenhagen depended less on the individual Member States’ performance and more on the ability of the EU as a whole to meet the 8% reduction target.

In its 2010 submission to the United Nations Framework Convention on Climate Change Secretariat, the European Environment Agency (2010b, 6) stated that, in 2008, the reduction of emissions within the EU15 was 6.5% compared to the base year, which falls

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<sup>64</sup> As 12 new Member States joined the EU after the 1998 burden-sharing agreement, there is no common Kyoto mitigation target for the EU with its 27 Member States, only for 15 Member States that acceded to the EU before 1997. Of the ten new Member States (those acceded on May 1, 2004), the 8 Eastern European new Member States have individual reduction targets of 6 or 8% under the Kyoto Protocol. Cyprus and Malta are the only member states with no Kyoto targets.

1.5% short of the EU's target. For the EU27, total emissions decreased by 11.3 % between 1990 and 2008. While this seems to bode well for the EU's policy coherence, the European Environment Agency report (2010b, 12) emphasizes that this declining trend in emission reduction can be attributed to developments in two of the EU's largest Member States, Germany and the United Kingdom, which accounted for 47% of all EU15 emissions. In Germany, "increasing efficiency in power and heating plants and the economic restructuring of the five new Länder after German reunification" accounts for its 22.3% drop in emissions in 2008 compared to 1990 levels. In the United Kingdom, a fuel shift from carbon-intensive solid fuels like coal and oil to less carbon-intensive fuels like natural gas took place, which helped the United Kingdom to cut its emissions by 19.1% compared to 1990. This drop was not linked to environmental considerations but rather resulted from "liberalising energy markets" (European Environment Agency, 2010b, 12). Among the new Member States, who joined the EU in 2004, Poland also substantially reduced its emissions due to "the decline of energy inefficient heavy industry and the overall restructuring of the economy in the late 1980s and early 1990s" (European Environment Agency, 2010b, 13).

After 2000, European emissions essentially stayed at the same level, about 5% below 1990 levels and the EU seemed unable to push further towards compliance with the minus 8% Kyoto target. The EU only started reporting further reductions in EU emissions after 2007. A 2% drop in emissions occurred in 2008, which can be linked to high fuel prices in that period, when crude oil prices peaked at US \$135 per barrel in the summer of that year: "The combination of high coal and carbon prices accompanied by a drop in natural gas prices in 2008 induced heat and electricity producers to replace more polluting coal by gas and as a result, reduce their [greenhouse gas] emissions" (European Environment Agency, 2010c). The recent economic crisis generated a

decline in industrial production, and emissions from industrial installations covered by the EU's carbon trading scheme fell by 11% in 2009 compared to 2008 (Euractiv, 2010e; Cooper, 2010, 12).

This economic crisis has resulted in CO<sub>2</sub> permits under the Emissions Trading System to trade between EURO 11 to EURO15 per tonne of CO<sub>2</sub>, which is widely considered to be a carbon price “well below the level which would force [companies covered under the ETS] into less carbon-emitting types or uses of energy” (Buchan, 2010, 3). After the Copenhagen conference, a report by environmental NGO Sandbag (2010a, 6) demonstrated that the Emissions Trading System – which covers 40% of the EU's emissions – only delivered “minuscule” savings of “no more than 0.3% carbon savings on total emissions in the current five year trading period, which ends in 2012” (Euractiv, 2010n). Cooper (2010, 19) concurs by pointing out that declines in the carbon intensity of industrial production “began well before the introduction of the Emissions Trading System, averaging 1.8 percent a year over the years 1990-2005, relative to real [Gross Domestic Product]”. The Commission acknowledges this and responded to the Sandbag report by pointing out that the Climate and Energy Package substantially revised the Emissions Trading System to make it more effective in meeting the EU's 2020 mitigation targets (Euractiv, 2010n).<sup>65</sup>

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<sup>65</sup> There are good reasons to doubt the accuracy of the Commission's claims that the revised ETS will indeed deliver in its third commitment period: Full auctioning of ETS permits will only be achieved in 2027. Exceptions were made for power sector heavily reliant on one fossil fuel, e.g. the dominant position of coal-fired power plants in the Polish energy sector. In December 2010, “[a] new regulatory regime for dispensing around 100 billion EURO of carbon permits has been approved by EU regulators, granting steelmakers and oil refineries free emission allowances” to prevent so-called carbon-leakage (Euractiv, 2010i). The full bankability of permits from the 2008-2012 commitment period in the post-2012 period will also undermine the effectiveness of the ETS, as it allows companies covered by the ETS to carry over unused carbon permits into the third commitment period.

Whether this ‘achievement’ strengthened the policy coherence of the EU at the Copenhagen climate summit is doubtful. The above-mentioned reports and the EU’s own reporting on its emissions trends confirm the impression of others in international climate negotiations that, while the EU may be well on track to meet its emission reduction targets under the Kyoto Protocol, the EU’s emission reductions so far have not been *policy-driven* and can be linked back to macro-economic events, such as the complete collapse of Eastern European economies, high oil prices, the recent economic recession or industry’s efficiency improvements, none of which are related to climate concerns. Achieving the Kyoto targets demonstrates a degree of policy coherence, but does not amount to providing directional leadership by developing solutions. For example, the EU launched the world’s largest carbon market, the Emissions Trading System, but this instrument has so far failed to prove effective in actually reducing emissions.

Moreover, outside observers of the EU’s climate policies are aware of the widely known fact that “Member States show large variations in [greenhouse gas] emission trends” (European Environment Agency, 2010a, 12). Until 1999, the EU was on track to meeting its target, but “a gap has opened that can only be explained by insufficient domestic action in many Member States during the 1999–2006 Period” (Parker & Karlsson, 2010, 933). Only five of the EU15 Member States – France, Germany, Greece, Sweden and the United Kingdom - will meet their Kyoto targets on the basis of existing and, in the case of France, some additional domestic measures. Some of the larger Member States, such as Italy, are far off the mitigation target, agreed upon in the 1998 Burden-Sharing Agreement, which distributed the EU mitigation target among EU Member States.<sup>66</sup> In

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<sup>66</sup> Decision of the Council of 25 April 2002 concerning the approval, on behalf of the European

1998, Italy had agreed to a 6.5% reduction, but Italian emissions “are about 5 % above 1990 levels in 2008” (European Environment Agency, 2010a, 24). Under the Burden-Sharing Agreement, Spain was awarded a possible increase of 15%, but “Spain increased emissions by 42 % between 1990 and 2008” due to its rapid economic development (European Environment Agency, 2010a, 116). These states will be required to resort to the flexibility mechanisms that are offered by the Kyoto Protocol by e.g. engaging in international emissions trading with states with surplus emission credits. For example, Italy will need to spend about EURO 1.8 billion to purchase some 181Mt of Kyoto credits, because its failed to reduce its domestic emissions (Sandbag, 2010b, 3). This leads to questions about how widely the conception of the EU as a climate leader is shared , even within the EU, given the diversity in track record among EU Member States when it comes to complying with the Kyoto targets.

This is also interesting for the internal climate politics of the EU. As mentioned before, only the pre-2004 EU15 Member States are legally bound by the common EU target of delivering an 8% reduction. Up to 2012, the new Member States, particularly in Eastern Europe, are only legally bound by their own national commitments under the Kyoto Protocol. In 1997, well ahead of their accession to the EU, these states agreed to reduce emissions under the Kyoto Protocol by between 6 and 8%. However, all these states (except Slovenia) saw a complete collapse of their economies and particularly heavy industries after the end of the Cold War. Compared to the 1990 base year, these emissions reductions range from -12.7% in Poland to -55.6% in Latvia (European Environment Agency, 2010a, 21).

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Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfillment of commitments thereunder (Official Journal L130 May 15, 2002, pp. 1-20).

Under the Kyoto Protocol, states can achieve their emission reductions in three ways. In addition to domestic policies and measures, industrialized countries can meet their targets by using three flexibility mechanisms (Lecocq & Ambrosi, 2007, 136). A first option is to engage in International Emissions Trading by buying surplus Assigned Amount Units from other industrialized states.<sup>67</sup> Secondly, industrialized states can achieve their mitigation targets by contributing to emission-reducing projects in other industrialized states through Joint Implementation. Or, a third option offered by the Kyoto Protocol enables industrialized states to invest in emission-reducing projects in developing countries through the Clean Development Mechanism. The first option allows EU Member States in Eastern Europe to offer their surplus Assigned Amount Units as cheaper mitigation options to other governments (like Italy) and companies, who will be unable to achieve their Quantified Emission Limitation and Reduction Objectives under the Kyoto Protocol through domestic measures alone.

Eastern European Member States have been among the most active on the carbon market in selling their surplus emissions rights bringing much-needed revenue to their budgets.<sup>68</sup> For example, Latvia netted EURO 100 million for selling 10 million surplus Assigned Amount Units and the Czech Republic raised about EURO 685 million from selling its surplus Assigned Amount Units (Point Carbon, 2009, 11 and 29). In 2010,

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<sup>67</sup> The UNFCCC (2009) defines an Assigned Amount Unit as follows: "A Kyoto Protocol unit equal to 1 metric tonne of CO<sub>2</sub> equivalent. Each Annex I Party issues Assigned Amount Units up to the level of its assigned amount, established pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol. Assigned Amount Units may be exchanged through emissions trading".

<sup>68</sup> Figures from the European Commission estimate that "the total figure [of surplus Assigned Amount Units] would add up to around 7.7 billion during the Kyoto period, which runs from 2008-2012. In that period, Russia accounts for 5.5 billion, Ukraine for 2.4 billion and the 10 Eastern European Member States for 2.2 billion of surplus Assigned Amount Units (Euractiv, 2009b). In other words, the surplus Assigned Amount Units of the economies in transition of Eastern European EU Member States only account for less than a quarter of the total amount of surplus Assigned Amount Units.

Poland and Estonia hope to raise respectively EURO 150 million and EURO 56 million from the sale of its Assigned Amount Units over the next year (Kruppa, 2010b and 2010g). The surplus Assigned Amount Units from Eastern Europe provide other Member States that are unable to meet their Kyoto targets due to rising emissions with a readily available mechanism to meet their mitigation targets at a lower price than implementing domestic reforms. Surplus Assigned Amount Units are usually traded at a lower price (in the EURO 10 range), which is cheaper than the price for Joint Implementation or Clean Development Mechanism offsets trading in the EURO 13 to 15 range.<sup>69</sup> The European Commission (2010a, 7) identified this practice as problematic and has explored other sources like the Cohesion Funds to fund a low-carbon transition in Eastern European Member States as an alternative to the sale of Assigned Amount Units, “which undermines the environmental integrity of the carbon market”. However, reaching an agreement on this proposal will be difficult given the recent economic setbacks and the significant sums involved for Eastern European Member States.

For the EU as a norm leader on climate change, this internal diversity, with both Member States with surplus Assigned Amount Units as well as deficit Assigned Amount Units, poses a serious challenge. The carefully worded conclusions of the last meeting of Environment Ministers before the Copenhagen summit demonstrates that the EU was unable to lead on this issue and take a strong position against an excessive reliance on

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<sup>69</sup> They have been able to sell their Assigned Amount Units, because “[t]hey have put, or promised to put, the proceeds of [Assigned Amount Units] sales into green investments”. While it is not legally required under the Kyoto Protocol, some of these ‘seller states’ have signed an agreement with the World Bank to invest the proceeds of these surplus Assigned Amount Units in Green Investment Schemes, defined by the World Bank (2008) as “a financing mechanism in which the proceeds from the sale of surplus [Assigned Amount Units] are reinvested in projects and/or programs in the [Economies in Transition] for the local, regional and/or global environment benefits, including further reducing [greenhouse gas] emissions”. The government of Hungary, Latvia, Czech Republic, Poland and Estonia have already sold Assigned Amount Units under such GIS deals (Tuerk *et alia*, 2010, 24-26).

surplus Assigned Amount Units:

NOTES that the [Assigned Amount Unit] surplus could affect the environmental integrity of a Copenhagen agreement if it is not addressed appropriately; WISHES TO CLARIFY that the EU will further consider options in view of discussions with other Parties (Council of the EU, 2009, 8).

This reflects the position of a group of Eastern European Member States, which preferred the EU to remain neutral on this issue (Szabo & Harrison, 2009). And this position also works for states that need to find quick and cheap options to comply by 2012 with their Kyoto targets. This absence of a truly ambitious position on some of the key issues like surplus 'hot air' for a post-2012 deal on climate change casts doubts over the degree of ambition behind the EU's leadership, as perceived outside the EU. Asked about the EU's level of ambition, a Japanese bureaucrat responded:

If the EU would increase its mitigation target from 20% to 30%, that would be ambitious. Surplus Assigned Amount Units can account for about 4% of the EU's effort to meet the Kyoto target. After the integration of Eastern Europe, they have a huge reduction potential. This is not the result of a decision on climate change policy, but the result of the collapse of Communist economies (Author's interview, Japanese bureaucrat, January 29, 2010).

President Obama's climate envoy, Todd Stern, made similar comments about the EU's insistence on 1990 as the baseline year for the post-2012 period. Before the negotiations on the EU's Climate and Energy Package, the European Commission had proposed 2005 as the baseline year for discussions, because 2005 was the year when the Emissions Trading System started and reliable data on emissions became first available. Buchan (2010, 7) describes the debate that ensued after this between EU Member States:

The new member states complained that basing future reductions on 2005 wiped out all recognition of their pre-2005 'national sacrifices', or effectively subsumed them into an 'EU achievement' in emission reduction. [...] However, the old member states, plus the Commission, retorted that the 1990s transformation of the eastern half of the EU could not be properly termed a 'sacrifice', because there was nothing voluntary about it, merely the inevitable consequence of communism's collapse.

Todd Stern is aware of this discussion about the appropriate baseline year within the EU and insisted that America's effort was comparable to the EU's with 2005 as a baseline.

There are games that can be played with respect to the baseline years. What we are doing as compared to where we are now is quite significant and virtually the same as what's proposed by the EU. It's different as compared to 1990 - that is true. But we're starting later - that's the reality (quoted in Harrabin, 2008).

To conclude, the EU's likely compliance with its Kyoto targets is unlikely to help its credibility as a 'directional' norm leader, as other key players in the United Nations Framework Convention on Climate Change framework perceive a low degree of 'policy coherence'. This is because, they find that 1990 is a convenient baseline year for the EU, taking advantage of emission reductions from before the Kyoto Protocol. External observers are well aware of the internal divisions within the EU, which have increased significantly after the accession of the new Member States from Eastern Europe.

#### **IV.4. Evaluating the ambition of the European Union's 2020 targets**

This doubt about the EU's leadership on its current Kyoto target also extends to its 2020 targets, i.e. the exact targets under negotiation at Copenhagen. Supported by the most recent Intergovernmental Panel on Climate Change reports, the EU was one of the few actors to insist ahead of Copenhagen, that "developed countries as a group should reduce their emissions below 1990 levels through domestic and complementary international efforts by 25 to 40% by 2020 and by 80 to 95% by 2050" (Council of the EU, 2009). In 2007, EU Heads of State and Government already agreed on a series of unilateral climate and energy targets to be met by 2020, in particular a reduction in EU greenhouse gas emissions of at least 20% below 1990 levels, regardless of climate-related actions by other major emitters. Moreover, the Council of EU (2009, 3) reaffirmed that the EU remained committed

to move to a 30% reduction compared to 1990 levels as its contribution to a global and comprehensive agreement for the period beyond 2012, provided that other developed countries commit themselves to comparable emission reductions and that developing countries contribute adequately according to their responsibilities and respective capabilities.

However, the EU's conditional offer for a 30% reduction as a shared goal for all Annex I countries is at the low end of what climate scientists recommend in terms of keeping a maximum 2 degrees increase in global average temperatures within reach. Leading environmental organizations within the EU, such as the European Environmental Bureau (2009), Greenpeace European Unit (2009), Climate Action Network Europe (2010), and Sandbag (2010a), have also described the 20% and 30% targets for the EU as inadequate. A string of recent studies details how at least 30% or 40% domestic emission cuts by 2020 compared to 1990 levels is possible without compromising economic growth. A report of Friends of the Earth and the Stockholm Environment Institute (2009, 4) supports such an objective "with emissions declining more than 5% annually from 2012 onwards". A study commissioned by the European Green Party also found that for the EU mitigation target to be consistent with limiting the increase in global average temperatures to maximum 2 degrees above pre-industrial levels, this "would imply the EU adopting a 30-40% reduction target" (de Bruyn *et alia*, 2009). Green groups referred in particular to Norway's commitment to a mitigation target of minus 40% ahead of Copenhagen in an effort to shame the EU into living up to its leadership role (Greenpeace UK, 2009). The EU might need to contemplate even higher targets, because the much-maligned Copenhagen Accord leaves the door open to consider "strengthening the long-term goal referencing various matters presented by the [climate] science, including in relation to temperature rises of 1.5 degrees Celsius" (Conference of Parties, 2009).

While the policy coherence between the EU's science-based climate objectives and its political targets has been one of the most criticized aspects of the EU's leadership, the EU's 2020 targets have also been criticized for being unambitious. As explained above, the EU is well on track to meeting – and maybe even surpassing – its target of an 8% reduction under the Kyoto Protocol's first commitment period without any of these drops in emissions resulting from EU-level climate policies. In other words, the EU only needs to reduce its emissions by 12% between 2013 and 2020. In comparison, the Obama administration in the US, despite lack of legislative progress, remains committed to the goal of reducing American emissions by 17%, by 2020, compared to the 2005 baseline year. While the use of 2005 as a baseline year is politically convenient for the United States – much like the 1990 baseline year is for the EU –, it cannot be denied that the effort of the US from now until 2020 is greater than the EU.<sup>70</sup> A policy officer for World Wildlife Fund's European office commented on the difference between the ambition levels of the EU and the United States:

Now, achieving 30% is as cheap or expensive as the 20% would be at the time [when the 2008 Climate and Energy package was approved]. From this point moving forward, the 20% target is quite a bit less effort than what the US is proposing. Compared to a 1990 base year, US emissions went up by 16% between 1990 and 2005, but they also went down by about 6% last year. Moving forward, you could see a case where the EU, based on the trends of the last 3 years, has to slow down its emission reduction pace to limit itself to only 20% emission cuts. Whereas a country like the US has to completely shift its trajectory (Author's interview, World Wildlife Fund's European Policy Office, January 18, 2010)."

While this comparison can be expected from environmentalists, this message is also coming from key EU decision-makers. In a joint op-ed, published in the Financial Times,

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<sup>70</sup> In the period between 1990 and 2005, American emissions went up by 21%, from 5806.15 megatonnes of CO<sub>2</sub> to 7034.15 megatonnes of CO<sub>2</sub> (Energy Information Administration, 2008). The choice of 2005 as the baseline year is clearly also politically motivated, as it ignores the surge in emission since the US signed and ratified the United Nations Framework Convention on Climate Change in 1992, which committed all industrialized states to aim to stabilize emissions at 1990 levels.

the environment ministers Chris Huhne, Norbert Roettgen and Jean-Louis Borloo (2010) from the United Kingdom, Germany and France respectively, support raising the EU's ambition, given recent drops in emissions resulting from the economic recession:

A reduction of 30 per cent from 1990 levels by 2020 would represent a real incentive for innovation and action in the international context. It would be a genuine attempt to restrict the rise in global temperatures to 2 [degrees Celsius] – the key climate danger threshold – stiffening the resolve of those already proposing ambitious action and encouraging those waiting in the wings.

Immediately after the Copenhagen Conference, the European Commission responded to these new emissions data by preparing a Communication, entitled “Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage”. This Communication identifies – since the EU's 20% mitigation target was agreed in 2007 – “some fundamental changes to the political and economic landscape of the EU's climate policy” (European Commission, 2010a, 13). In particular, high energy prices in 2007 and 2008 and the financial and economic crises that hit in 2008 and 2009 have helped the EU to cut emissions in 2009 and given a boost to investments in energy efficiency and the development of renewable energy sources. Whereas the European Commission (2010a, 3) estimated the costs of reaching the target to be at least EURO 70 billion per annum in the year 2020, the recession that started in 2008 lowered the price tag to EURO 48 billion or “30% less than expected 2 years ago”.

The European Environment Agency (2010c) published estimates that the EU27 almost reached their shared mitigation target for 2020 in 2009:

Based on these estimates, the EU-27's 2009 emissions stand approximately 17.3 % below the 1990 level and therefore very close to the bloc's target of cutting emissions 20 % by 2020. The EU-15 stands 12.9 % below the base-year level, exceeding its Kyoto commitment to an 8 % reduction for the first time.

According to environmental NGO Sandbag (2010a), the cornerstone of EU climate policy – the Emissions Trading System – risks becoming “thoroughly obsolete”. As a consequence, the Emissions Trading System might lock the EU into higher levels of emissions, rather than actually capping emissions (Sandbag, 2010c), as many companies operating in the EU will be able to carry forward the unused allowances under the Emissions Trading System, given out to them for the period 2008-2012 into the next commitment period, which will result in substantially lower demand for EUAs and subsequently lower prices on the carbon market. Climate commissioner Connie Hedegaard expressed the hope that the European Environment Agency report could “inspire the necessary debate on how fast the EU can reach even more ambitious targets” (quoted in Kruppa, 2010d).

However, the EU remains internally divided about how ambitious an EU-wide mitigation target should be. Eastern European countries have expressed fears about the costs of transitioning to a low-carbon energy mix, even though “Central and Eastern Europe is still a veritable orchard of low-hanging fruit, in terms of potential energy efficiency improvements and renewable energy increases, for the European Union to grasp” (Buchan, 2010, 1). Buchan points at the potential for serious emission reductions that could be gained from a fuel-switch in Poland from coal to gas. In Western Europe, the Italian government is among the most vocal opponents of the EU’s Climate and Energy package and – after that – of proposals of a unilateral move by the EU to a 30% emissions cut in the absence of comparable actions by other major emitters (Hawley, 2008; Euractiv, 2010g; Sandbag, 2010b). Given the relative openness of the policy-making process in Brussels, other negotiators in Copenhagen understood the internal politics behind the EU’s targets. For example, secretary-general Yvo de Boer of the UNFCCC Secretariat declared that the lack of ambition behind the EU’s 20% target as

one of the main reasons why the EU's leadership was insufficiently respected in Copenhagen:

Many of the discussions that you have in Europe are not terribly private. And the rest of the world knows that the European Commission said to EU countries that achieving the minus 20% was a piece of cake and that achieving minus 30% isn't going to ruin the European economy. So countries in the rest of the world are asking themselves: 'If that's true, then why is this minus 30 now being taken off the table?' (quoted in Euractiv, 2010b)

In other words, the lack of ambition undermines the credibility of the EU's message that economic prosperity and lower emissions can be combined. This argument is of great importance to convince both developed and developing countries to scale up their mitigation ambitions.

#### **IV.5. Evaluating how the European Union is keeping its commitments: The role of offsetting**

Clearly, outside observers of the EU have their doubts about the EU's mitigation targets as evidence for its leadership. Another factor undermining the EU's policy coherence is the EU's reliance of international offsets<sup>71</sup> for meeting its mitigation target. The Kyoto Protocol foresees the possibility for Annex I countries to trade emissions with each other through Joint Implementation (JI) or with developing countries through the Clean Development Mechanism (CDM). Criticism is focused on the great importance of offsets for meeting the EU's mitigation targets as well as their questionable contribution under the Clean Development Mechanism to the sustainable development of developing countries. The operational rules for these flexibility mechanisms were agreed in 2001 during the 7<sup>th</sup> Conference of Parties in Marrakech.

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<sup>71</sup> For de Sepibus (2008, 3), "[a]n international offset [in the ETS] represents a credit which certifies the reduction, removal, or avoidance of greenhouse gas emissions by a project taking place outside of the European Union and that is used to compensate for greenhouse gas emissions occurring in the European Union".

The Marrakech Accords decided that “the use of the mechanisms shall be *supplemental* to domestic action and that domestic action shall thus constitute a significant element of the effort [my emphasis]” to reduce emissions in line with the targets in the Kyoto Protocol for Annex I states (Conference of the Parties, 2001, 53). In the preparations for the 7<sup>th</sup> Conference of Parties in Morocco, the EU had led the efforts to set quantitative limits to the use of external credits, thanks to the presence of Green Parties in charge of climate negotiations in key EU Member States (Lecocq & Ambrosi, 2007, 135). However, these efforts met with serious resistance from other industrialized states. Among others, Japan, the United States and Canada felt that the EU’s 1998 burden-sharing agreement “afforded the EU ‘hot air’ and geographic flexibility the EU denied to others” by wanting to limit access to flexibility mechanisms (Yamin, 2000, 55-60). Since the Marrakech Accords, the EU has considerably changed its stance: It shifted away from its original position, away from proposing a quantified ceiling on the use of offsets to guarantee the supplemental nature of flexibility mechanisms to reserving an important role for Clean Development Mechanism and Joint Implementation projects in the Emissions Trading System (see also Cass, 2005).

Despite the initial hesitance, the EU agreed on a ‘Linking Directive’ in 2004, which allowed for EU Member States and European companies to resort to international offsets for complying with the targets under the Kyoto Protocol.<sup>72</sup> This section concentrates on the use of international offsets in the Emissions Trading System, as it covers about 40%

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<sup>72</sup> Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms. Text with EEA relevance (Official Journal L 338, November 13, 2004, pp. 18-23).

of EU emissions.<sup>73</sup> First, the role of international offsets in the Emissions Trading System after the Kyoto Protocol expires in 2012 is addressed. In this third trading period, stretching from 2013-2020, an EU-wide cap is introduced in the ETS to avoid Member States overestimating emission levels from their national economies.<sup>74</sup> Using this one cap, the EU aims to reduce the emissions covered by the trading scheme by 21% below reported 2005 levels, the year the Emissions Trading System got started. The supplementarity principle requires that at least 50% of emission reductions performed under the EU's Emissions Trading System should take place inside the EU. In other words, the maximum access to offsets for each operator covered by the Emissions Trading System is set at 50% of the required emission reductions below the 2005 baseline over the period 2008-2020 (personal communication European Commission, August 19, 2009). Given that Certified Emission Reductions obtained from Clean Development Mechanism projects trade at a lower price on the international carbon markets than permits in the Emission Trading System, companies will choose the cheaper option and rely on international offset projects, potentially allowing "Europe's domestic emissions to grow a staggering 34% from current levels by 2016" (Sandbag, 2010a, 6).

Environmental groups such as WWF (Euractiv, 2009c) and Friends of the Earth have criticized the EU's reliance on offsets, as it "would effectively halve an already dangerously low ambition and undermine an already weak policy framework" (Bullock *et alia*, 2009, 8). Environmental NGO Sandbag (2009, 12) found that in 2008 the main source of emissions reductions under the Emissions Trading System originates from

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<sup>73</sup> Several authors (Ellerman & Joskow, 2008; Parker, 2008, Sandbag, 2009; Flåm, 2009) already covered the ETS and its use of international offsets in the EU during the 2005-2007 'trial period' of the ETS and in the 2008-2012 first commitment period.

<sup>74</sup> An overallocation of permits by national government during the first and second commitment period of the ETS led carbon prices to crash completely.

actual domestic emission reductions (31%), the effects of the domestic recession (23%) and reliance on Certified Emission Reductions from Clean Development Mechanism projects (42%) and companies already borrowing carbon permits in 2008 from the next commitment period (4%). The economic recession will result in a considerable surplus of permits:

Bankability of permits and credits means that nearly 40% of Phase 3 effort could be met by carry-over from Phase 2, again without companies having to invest in reducing domestic emissions. Or put another way, the Emissions Trading System will not require domestic emissions for the next seven years (Sandbag, 2009, 14).

This forecast depends on the extent to which economic growth in the European economies will be accompanied by rising emissions in the years to come, but the point should be clear. The recent drop in emissions combined with the flexibility offered to European companies in the Emissions Trading System is unlikely to oblige or even give incentives to companies in the EU to reduce the carbon intensity of their operations for the foreseeable future.

Apart from the important future role of international offsets from 2013 onwards, questions have been raised about which types of Clean Development Mechanism projects have received funding from the EU in the second commitment period of the ETS (2008-2012). The purpose of the Clean Development Mechanism, under Article 12.2 of the Kyoto Protocol, is to create a win-win situation: On the one hand, Clean Development Mechanism projects should help developing countries “in achieving sustainable development”, while, on the other hand, aiding industrialized countries achieve their Kyoto targets. This goal is to be achieved by investing in projects that provide “real, measurable, and long-term benefits related to the mitigation of climate change” and “reductions in emissions that are additional to any that would occur in the absence of the certified project activity” (Article 12.5 Kyoto Protocol). However,

questions have been raised about the additionality of some Clean Development Mechanism projects. The Marrakech Accords (Paragraph 43) consider a Clean Development Mechanism project activity to be additional “if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered [Clean Development Mechanism] project activity” (Conference of the Parties, 2001, 83). This additionality criterion is measured against a hypothetical baseline scenario, which is supposed to “reasonably represent the anthropogenic emissions by sources that would occur in the absence of the proposed project activity” (Paragraph 44) or – in other words – a business-as-usual scenario (Conference of the Parties, 2001, 83).

The NGO Sandbag has engaged in a painstaking study to track the offsets purchased by operators covered under the Emissions Trading System. Sandbag (2010d) found that of all Certified Emission Reductions purchased in 2009 by European companies, almost 60% had been invested in projects in HFC destruction projects. Even stronger, “[t]he top 10 [Clean Development Mechanism] projects, all of which are industrial gas projects [HFC-23 or N<sub>2</sub>O], accounted for 66% of all [Certified Emission Reductions] surrendered into the [Emissions Trading System] in 2009” (Sandbag, 2010d, 5).<sup>75</sup> Why are projects that destroy such industrial gases in such high demand in the Clean Development Mechanism? The answer can be found in the high Global Warming Potential of some greenhouse gases like HFC-23 and N<sub>2</sub>O. According to the Intergovernmental Panel on Climate Change, these gases have a Global Warming Potential that is respectively 11.700 times and 310 times higher than CO<sub>2</sub> (Intergovernmental Panel on Climate Change, 2007b, 212). Such projects lead to the issuance of a large amount of Certified

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<sup>75</sup> HFC-23 or hydrofluorcarbon is an unwanted by-product in the production of HCFC-22, a refrigerant and temporary substitute for CFCs. N<sub>2</sub>O, also known as laughing gas, is a chemical compound used in nylon production, nitric acid production and, fossil fuel fired power plants.

Emission Reductions, in the case of HFC-23, 11.700 times as many credits as projects that reduce CO<sub>2</sub>.<sup>76</sup> Not surprisingly, many companies in Annex I countries that require offsets to cover their excess emissions as well as Clean Development Mechanism project developers, have focused on HFC-23 projects. While such Clean Development Mechanism projects have undoubtedly helped Annex I countries to comply with their targets, they contribute little to an equally important part of the Clean Development Mechanism's purpose of "achieving sustainable development" in developing countries, as laid down in Article 12 (2) of the Kyoto Protocol.

One of the main critiques of both the environmental and development organisations is the elimination of a powerful greenhouse gas like HFC-23 in developing countries, which can be registered as a Clean Development Mechanism project. As it is very cheap to install a facility for the destruction of HFC-23, Clean Development Mechanism projects have resulted in huge windfall profits for their emitters. Their owners can generate income from producing refrigerant gases like the HFC-22 as well as receive Clean Development Mechanism funds to eliminate their waste, the HFC-23 emissions, earning "almost twice as much from [Clean Development Mechanism] credits as they can from selling refrigerant gases" (Wara, 2007, 596). This has given refrigerant manufacturers a perverse incentive to artificially stimulate the production of HCFC-22 in order to produce more waste product, HFC-23. Wara goes on to point out that there are only 17 refrigerant producers in the developing world, which could be paid EURO 100 million to

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<sup>76</sup> The example of Clean Development Mechanism projects in China, where most offsets in the Emissions Trading System originate from, illustrates this point. The average annual CER volume for a registered Clean Development Mechanism project that installs wind power in China generates 111.06 CER, which is equivalent to 111.06 Kilotons of CO<sub>2</sub> emission reduction per year. In comparison, the average annual CER volume for a registered Clean Development Mechanism project that destroys HFCs in China generates 5778.55 CER or more than 50 times the volume of Certified Emission Reductions (EU-China Clean Development Mechanism Facilitation Project, 2009, 31).

install the simple technology needed to destroy HFC-23, “saving an estimated EURO 4.6 billion in [Clean Development Mechanism] credits that could be spent on other climate-protecting uses” or 1/47 of the total value of HFC credits (EURO 4.7 billion) (Wara, 2007, 596).

In the summer of 2009, just before the Copenhagen conference, this criticism by green groups, such as Clean Development Mechanism Watch and the Environmental Investigation Agency, was acknowledged by the Clean Development Mechanism Executive Board, which “delayed the issuance of 13.6 million [Certified Emission Reductions] [...] amid accusations that plant owners have manipulated their production rates in order to squeeze more money out of the [Clean Development Mechanism]” (Chen, 2010). The EU’s heavy reliance on such projects to meet its targets, as well as their questionable contribution to realizing meaningful emissions cuts did not help the EU’s credibility as a leader. After the Copenhagen conference, the Clean Development Mechanism Executive Board delayed the approval of specific projects, pending a broader review of all HFC-23 projects. This review investigates the rumours about refrigerant producers ‘gaming’ the Clean Development Mechanism system, is currently underway (Allan, 2010). As talk of a scandal has gained traction, the EU’s Climate Action Commissioner Connie Hedegaard has asked for proposals “to introduce further quality restrictions on the use of credits from industrial gas projects in the post-2012 EU Emissions Trading System” (Euractiv, 2010j). Even though the Emissions Trading System is the world’s largest carbon market, the EU scored fewer brownie points than originally anticipated with other states for investing in Clean Development Mechanism projects in developing countries, as both the complementarity and the quality of these offsets were questioned.

#### **IV.6. In defence of the European Union's leadership**

Given the difficulties that the EU as a whole has faced over the past decade to make the significant cuts under the Kyoto Protocol and its increasing reliance on external credits, the EU's performance on policy coherence in its climate policy is 'too little, too late'. Three caveats should be added however.

First of all, the EU's diplomacy invested considerable political capital in the United Nations Framework Convention on Climate Change process and the EU's leadership does deserve some credit for shaping some crucial goals for a future international agreement on climate change. The EU is also one of the few actors that consistently refers to the scientific recommendations of the Intergovernmental Panel on Climate Change, requiring steep emission reductions in developed countries in the range of 25-40% by 2020 and 80-95% by 2050 (Council of the EU, 2009, 2). Moreover, the EU has also used Intergovernmental Panel on Climate Change reports to advocate for the objective of limiting the average global temperature increase to less than 2 degrees Celsius compared to pre-industrial levels. This has now become internationally accepted as defining "dangerous anthropogenic interference with the climate system" in the United Nations Framework Convention on Climate Change. This 2 degrees target has also been included in the Copenhagen Accord. Notwithstanding, this chapter has argued that the EU's lack of policy coherence, particularly in the area of mitigation where the EU's own record is mixed, failed to provide other states with the required incentives to step up to the plate with concrete commitments. With regard to adaptation and the issue of climate finance, the EU scored some minor successes (to be covered in the next chapter).

Secondly, and contrary to the tone used by negotiators from outside the EU, the emission reductions achieved in the EU were not a ‘free lunch’, but came on the back of considerable economic costs for Member States and stretched budgetary situations in EU Member States. Integrating the collapsed planned economies of Eastern Europe with the rest of the European economy came with a hefty price tag. This is why using the term ‘hot air’ to refer to excess Assigned Amount Units “is vehemently opposed by the seller countries, who instead emphasise the huge social and economic costs of the transition from planned to market economy which has enabled these reductions” (Point Carbon, 2009, 1; Buchan, 2010, 8). For example, the total budget of the EU’s Structural Funds and Cohesion Funds amounted to over EURO 200 billion in the period 2000-2006 and EURO 308 billion in the period 2007-2013 (European Commission DG Regional Policy, 2007). Moreover, companies operating within the EU’s Internal Market took advantage of the lower labour and production costs available in the new Member States, adding additional competitive pressures on the economies of Western Europe. Germany has also paid a hefty price for the so-called ‘Wall fall’ emission reductions after the reunification of East and West Germany, amounting to about US \$1.7 trillion or more than half of its estimated US \$2.9 trillion annual Gross Domestic Product (Slackman, 2010). Yet, this is an argument that is rarely used by EU policy-makers, presumably because it takes away from the dominant leadership discourse, which seeks to scale up ambitions for mitigation.

Thirdly, the EU has been able to break the long-term trend, whereby emission figures track economic activity, essentially decoupling energy input from wealth creation.<sup>77</sup> The EU-27 Gross Domestic Product grew between 1990 and 2007 by 44.8%, but its

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<sup>77</sup> This being said, short-term fluctuations in economic growth still have an impact on emissions.

emissions essentially stabilised, even declining slightly by 4%. In contrast, the United States grew its economy by 62.6%, but its economic growth was accompanied by a 20.6% increase in emissions in the same 1990-2007 period. Credit should be given to the EU for preventing its emissions to rise as dramatically as in the US. There may be a sense of disappointment that overall emission reductions in the EU during the first commitment period did not decline further. Yet, the fact of the matter remains that European emissions over the last 20 years have essentially stabilized. All industrialized countries have made progress in improving the energy efficiency of their economies, but the carbon intensity of the EU's economy has come down the most, decreasing by 33.2%, which is the biggest improvement in carbon intensity among all other Annex I parties.<sup>78</sup> In addition to a relatively low carbon intensity of its economy, the EU's emissions per capita in 2007 were also less than half of those in the US, 7.92 tonnes/capita compared to 19.10 in the United States (International Energy Agency, 2009). Related to this point, the EU has also curbed the trend of an ever greater reliance on fossil fuels for its energy production. The share of renewables in energy production and the use of biomass in the EU has picked up considerably over the last few years (European Environment Agency, 2010c). The European Commission expects 64% of new power to be installed between now and 2020 to be renewable energy with renewables making up 36.1% of total electricity generation in 2030 (Euractiv, 2010a). This trend again puts the EU in a more favourable light than other advanced

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<sup>78</sup> In discussions on the decreasing carbon intensity of developed countries' economies, it is important to keep in mind that the de-industrialisation of the industrialized countries towards a services-based economy, shifting production (and therefore emissions) to developing countries where production costs are lower, is definitely part of the explanation. For example, Wang and Watson (2008, 577) found that the emissions stemming from goods that are exported from China to other countries accounted for 23% of China's national total emissions in 2004. However, the United Nations Framework Convention on Climate Change only takes into account where emissions are produced, not where the products manufactured by these emissions are ultimately consumed. Nonetheless, I include the point about the EU's more advanced progress in lowering its carbon intensity, as delocalisation of manufacturing industries has occurred in all developed economies.

industrialized countries.

This chapter has criticized the EU's lack of policy coherence and its implications for the effectiveness of its leadership on climate change, but it is important to consider the EU's leadership not in isolation, but compare its attempted leadership to the record of other states, especially Annex I countries. Ever since signing up to the United Nations Framework Convention on Climate Change in 1992, the trend in emissions in Japan, the US, Canada, and Australia have increased by 15.5%, 20.6%, 27.7% and 45.8% respectively (International Energy Agency, 2009, 56). Adding insult to injury, concrete steps to reign in their increasing emissions remain stalled, both before and after the Copenhagen conference. The situation has resulted in the lack of progress towards an international agreement on climate change, and more importantly "[make] it almost unfeasible to reach relatively low global emission levels in 2020 needed to meet 450 ppm CO<sub>2</sub>-eq, as was first assumed feasible by some studies, 5 years ago" (den Elzen & Hoehne, 2008, 250). These tactics waste precious time and the 'laggard states' carry a big responsibility for moving the planet closer to dangerous climate change. In contrast, the EU has been a pioneer in developing concrete policy responses to climate change. Setting up the world's largest carbon market, despite its flaws, remains an impressive feat, demonstrating a sustained political commitment to combat climate change. Moreover, the EU's experience with Clean Development Mechanism projects, and with developing comprehensive climate policy more generally, is widely recognized outside the EU. The EU's Climate and Energy Package remains the only comprehensive climate policy among all Annex I countries that is legally binding and being implemented.

Given this less than favourable international political climate, it is not surprising that there is little action elsewhere and that emissions are rapidly rising in emerging

economies like China, India, Brazil and so on. This has strengthened the hand of those within the EU that emphasize the negative impact of ambitious mitigation targets in the absence of action elsewhere in the developed world. This situation has spurred some actors within the EU to call for border adjustment measures. Such measures serve a dual purpose: They aim to address the free-rider behaviour of other states, who have not moved decisively on reducing their emissions. Secondly, they intend to shield carbon-intensive European industries, such as cement and steel companies, from the negative effects of ambitious climate policies in the EU on their international competitiveness. Border adjustment measures include “import tariffs, export rebates, or the obligation for importers to surrender carbon allowances for the amount of CO<sub>2</sub> that is emitted as a consequence of the good’s production” (Kuik & Hofkes, 2010, 1742) and would be levied on imports from countries, where no or far less stringent climate policies apply. Ironically, the bill that was sponsored by Congressmen Edward Markey and Henry Waxman and approved by the US House of Representatives in June 2009 as *The American Clean Energy and Security Act* as well as the Kerry-Lieberman proposal for an *American Power Act* in the Senate included provisions for such border adjustment measures. However, the prospect of climate legislation remains highly unlikely in the US. In contrast, EU Member States are divided on the issue: France and some of the Eastern European Member States are in favour of a “climate tax” levied at the EU’s border. However, many of the export-oriented EU Member States fear trade wars and retaliatory measures, because the EU’s trading partners might perceive such border adjustment measures as a form of ‘green protectionism’. Karel De Gucht, current EU trade commissioner, spoke out against such carbon border tariffs for that very reason (Euractiv, 2010k). Moreover, implementing such a punitive approach also detracts from the ‘directional leadership’ image the EU tries to project, and could hamper the EU’s level of policy coherence in other global negotiations, in particular its long-established

policy of promoting the liberalisation of world trade. Finally, the legality of such carbon border tariffs under the rules of the World Trade Organisation is questionable (de Cendra, 2006; Ismer & Neuhoff, 2007).

#### **IV.7. Conclusion**

The previous chapter explored the EU's own attachment to a global mitigation norm, demonstrating how norm resisters within the EU have been able to temper the EU's unilateral mitigation ambitions on climate change. This chapter explored the consequences of the EU's hesitations about living up to the demands of a global mitigation norm. By applying the concept of 'policy coherence' to the EU's climate policies, I demonstrated how the EU's compromises about its own ambitions on climate have negative consequences for the credibility of the EU's leadership in the eyes of others and its negotiation partners in particular. I showed that there is a widespread perception among environmentalists and actors outside the EU that European politicians have been overselling its leadership on climate change.

The EU's policy coherence was 'put to the test' in three crucial domains. First of all, I identified that the EU's compliance with its joint emission reduction target under the Kyoto Protocol was not policy-driven, but rather was the consequence of economic events that the EU was unable to influence, such as high oil prices. The EU's negotiation partners identified the reliance by EU Member States on the 'hot air' credits – both as sellers and buyers – as problematic. Related to this point, the EU's insistence on 1990 as a baseline year for negotiating mitigation targets is perceived as too convenient for the EU. Secondly, the EU's unilateral 20% mitigation target is also perceived as incompatible with the EU's leadership rhetoric, because a 20% reduction is not in line

with the recommendations in reports of the Intergovernmental Panel on Climate Change. Moreover, the impact of the 2008-2009 economic recessions and the resulting drop in European emissions further nurtured the perception that the EU's 20% mitigation target is an example of 'cheap and symbolic action', not a demonstration of leadership. Not only environmentalists, but even the European Commission and the environment ministers of France, Germany and the United Kingdom acknowledged this new reality. Thirdly, the important role of international offsets in the third commitment period and the questionable environmental integrity of the international offsets used within the EU's ETS, display how the EU has been 'cutting corners' in its leadership in attempt to reduce the cost of complying with its current and future mitigation targets. The overall picture that emerges from this detailed discussion of the EU's mitigation record is of an EU leadership on climate change that is largely self-proclaimed, but little recognized by others. Due to the EU's low level of policy coherence on mitigation, the EU is perceived as a half-hearted leader on climate change.

Two caveats should be added to this rather harsh conclusion of the EU as a leader without followers. Many leading decision-makers within the EU recognize that improving the EU's policy coherence will make the EU's leadership more credible. After the Copenhagen, the European Commission (2010d, 8) drew the following lesson: "The most convincing leadership that the EU can show is concrete and determined action to become the most climate friendly region in the world". The new Commissioner for Climate Action, Connie Hedegaard, recognized that the EU needs to demonstrate how ambitious EU climate policies "will enhance our competitiveness, strengthen our energy security, stimulate green economic growth and innovation, and by that we will create new jobs" (Euractiv, 2010h). Once the EU takes this message to heart and shows substantial emissions reductions combined with strengthened economic

competitiveness, the EU will be turned into a more credible norm leader and serve the long-term goal of preventing dangerous climate change.

Secondly, the EU's climate leadership may be a story of the 'glass half full or glass half empty' or 'too little too late', but the actions of other advanced industrialized states are 'empty glasses' story that arrived 'way too late'. The failure of American, Canadian, Australian and Japanese politicians to implement anything that resembles a credible approach to reduce emissions is appalling. Because the EU sought to increase expectations and called for more ambitious mitigation targets, it became easy for the EU's negotiating partners to depict the EU's climate leadership as a 'half empty glass'. In a way, American climate policy under George W. Bush displayed greater policy coherence by denying the scale or even the existence of the problem of climate change and taking no real action. In contrast, EU officials insist that much has already been achieved, while recognizing that more could be done. Whatever the possible criticisms, the EU did set mitigation targets and approved a range of policies to implement them. Within the EU, carbon emissions do carry a price and the EU's ETS is the largest source of demand for offsetting projects in the world. Member States will comply with the Kyoto Protocol, making the EU the first actor among all industrialized countries to have broken the long-term trend whereby economic growth is accompanied by growing emissions. Nonetheless, the argument that the EU's mixed record on climate change is better than the abysmal record of the US, Canada or Australia hardly qualifies as a sound demonstration of the EU's directional leadership.

In conclusion, no matter how ambitious the EU's own mitigation targets are, the EU alone cannot 'solve' climate change. Its contribution can only be effective in the context of a global agreement to let global emissions peak as soon as possible. The EU's

relative share of global emissions currently stands at about 10% and is declining. China and the United States – the world’s two largest emitters – account for 40% of global emissions. American emissions are still rising, notwithstanding the short-lived effects of the current economic crisis. More importantly, the emissions of emerging economies like China’s are rising rapidly, as their economies develop. To achieve its goal of limiting temperature increases to 2 degrees Celsius, the EU needs to convince other countries of the need and the feasibility of scaling up their mitigation ambitions. The next two chapters explore how the EU has promoted a global mitigation norm vis-à-vis the current world’s largest polluter China at the multilateral level during the Copenhagen climate change summit and in its bilateral interactions with China. However, the combination of the EU’s internal hesitations about cutting emissions and the external perception of its poor policy coherence on mitigation limits the EU’s leadership potential in the promotion a global mitigation norm.

## **Chapter V: The European Union in Copenhagen: Caught between a Chinese rock and an American hard place**

### **V.1. Introduction**

The EU came to the 15<sup>th</sup> Conference of Parties under the UNFCCC framework in Copenhagen “to cut the deal” in the words of the Swedish Environment Minister Karlgren (Swedish presidency of the EU, 2009). The EU dangled the carrot of a conditional 30% reduction effort by the EU, as well as the prospect of about EURO 100 billion per year of financial support for adaptation and mitigation actions in developing countries, in front of other participants at the conference, “provided that other developed countries commit themselves to comparable emission reductions and that developing countries contribute adequately according to their responsibilities and respective capabilities” (Council of the EU, 2009, 3). The EU “seemed well prepared” with a clear set of objectives for the COP15, which it had announced well in advance and which prioritised mitigation (Haug & Berkhout, 2010, 22). In return for these lofty EU objectives, the Council of the EU (2009, 2), comprised of Environment Ministers, set out the core of its ambitions in its conclusions. It held that it:

UNDERLINES that, in accordance with the findings by the [Intergovernmental Panel on Climate Change] in its [4<sup>th</sup> Assessment Report] and more recent studies, developed countries as a group should reduce their GHG emissions below 1990 levels through domestic and complementary international efforts by 25 to 40% by 2020 and by 80 to 95% by 2050 while developing countries as a group should achieve a substantial deviation below the currently predicted emissions growth rate, in the order of 15-30% by 2020 (Council of the EU, 2009, 2).

In the EU’s view, these mitigation actions were to be enshrined in “a single legally binding instrument”, which “builds on the Kyoto Protocol and incorporates all its essentials, as an outcome from Copenhagen in December 2009” (Council of the EU, 2009, 13).

However, EU leaders came away from Copenhagen disappointed. In his final press conference in Copenhagen, Commission President Jose-Manuel Barroso (2009) made clear that “the text agreed today [the Copenhagen Accord] falls short of our expectations. Quite simply, our level of ambition has not been matched, especially on the need for a legally binding agreement”. The Copenhagen Accord did recognize “the scientific view that the increase in global temperature should be below 2 degrees Celsius” and that “deep cuts are required according to science”, which will require cooperation “in achieving the peaking of global and national emissions as soon as possible” (Conference of the Parties, 2009). The Copenhagen summit went the same way as the Plan of Implementation of the 2002 World Summit on Sustainable Development, “where governments gave little indication of how they would reach these goals and thus left them largely at the level of ambiguous, unenforceable promises” (Wapner, 2003, 3). Similarly, the Accord does not address who should make these emissions cuts, what finance mechanisms will be available, how deep these cuts must be and by what time these emission reductions should be achieved.

What is new about the Accord is that, in the words of US President Obama (2009), “all major economies have come together to accept their responsibility to take action to confront the threat of climate change”. Obama’s emphasis on ‘major economies’, which means all major emitters, seems to supplant the long-standing division between industrialized states with commitments and developing countries without commitments to reduce their respective emissions. The Accord states that industrialized countries should “implement individually or jointly the quantified emissions targets for 2020”, while developing countries should commit to “mitigation actions”. However, the language in the

Copenhagen Accord states clearly that such mitigation actions by developing countries come with some major caveats. This is by:

recognizing that the time frame for peaking will be longer in developing countries and bearing in mind that social and economic development and poverty eradication are the first and overriding priorities of developing countries and that a low-emission development strategy is indispensable to sustainable development (Conference of the Parties, 2009). Despite Obama's talk about the "unprecedented" nature of the Accord (Obama, 2009), we should bear in mind that the commitments undertaken in this Accord are voluntary and do not include any indication about the expected level of ambition. Given this, the Accord does not depart substantially from the commitments of *all Parties*, including China, India, Brazil and the like, under article 10(b) of the Kyoto Protocol to "[f]ormulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change".

While such commitments from emerging economies like China are important for the legislative progress on climate change in the US, the EU aimed higher in Copenhagen, namely to develop a single, legally binding international treaty with ambitious emission targets for both industrialized and developing states, which could replace the Kyoto Protocol after 2012. However, the Copenhagen Accord delivered a very different outcome, a voluntary process whereby states will report in National Communications on their national climate change policies, "with provisions for international consultations and analysis under clearly defined guidelines that will ensure that national sovereignty is respected" (Conference of the Parties, 2009). This is a bottom-up process, whose international review mechanisms remain undetermined and where governments put forward what they themselves consider (economically) feasible, independent of scientifically sound targets.

This chapter explores how the EU tried to promote a global mitigation norm at the multilateral level in the lead-up to and during the Copenhagen climate summit in December 2009, with a particular focus on the interactions between the EU and China. I argue that the EU's failure to produce a more successful outcome in Copenhagen results from its inability to bridge the divergent interpretations of the Common But Differentiated Responsibilities (CBDR) principle of industrialized and developing states that have characterized multilateral negotiations on climate change. Due to its own relatively low level of ambition in reducing emissions, the EU was unable to serve as an 'honest broker' that could reconcile the conflicting negotiation positions of the world's two largest emitters, the US and China.<sup>79</sup> This chapter covers all climate-related international negotiation sessions in 2009, from the preparatory events for the Copenhagen climate summit to the 15<sup>th</sup> Conference of Parties in December 2009 and its immediate aftermath. This chapter's thematic emphasis is on the central sticking point of the Copenhagen negotiations, namely legally binding mitigation commitments for emerging economies, and China's reaction to such demands. Much of this chapter will need to be focused on the interactions between China and the US, and as a result less on the EU. This flows from the fact that the Chinese and American policy positions were emblematic of the opposing sides of debates in the context of the UNFCCC.

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<sup>79</sup> The previous chapter explained the lack of recognition for the EU's leadership as a result of the EU's lack of policy coherence: The EU – despite its self-proclaimed leadership role – remains hesitant about the appropriate level of ambition in reducing its own emissions due to fears about the economic impacts of moving unilaterally to a low-carbon economy.

## **V.2. Theoretical framework**

It is undeniable that, while the causes and impacts of climate change will be global, “relative contributions to the problem and the burden of its consequences are highly asymmetrical” (Rayner & Okereke, 2007, 118). The responsibility for the rise in GHG concentrations in the atmosphere is linked to the economic development of the industrialized world. Depending on the calculations used, Hoehne (2006, 60) demonstrates that industrialized countries account for more than 50 to 60% of the historical contributions to climate change. Moreover, a string of recent reports (Oxfam, 2009; Annan & Global Humanitarian Forum, 2009) on the impacts of climate change in terms of increased vulnerability to droughts, rising sea levels and increased hurricane activities warn that climate change will hit the populations of developing countries hardest. Hence, it should come as no surprise that issues of justice, inequality, and economic growth to alleviate poverty are always central to global negotiations on climate change. For Brunnée and Toope (2010, 128), “[t]hese issues must be addressed if an international climate regime is to succeed”. This will in turn require bridging the “radically different perceptions of the problem” between developing states, which “see climate politics as part of a larger pattern of historical and economic injustices, and industrialized state, which view climate policy rather “as a matter of pragmatic problem solving” (Brunnée & Toope, 2010, 128).

This concern about the inequity behind some of the world’s big environmental challenges is not exclusive to the issue of climate change alone. According to Chasek, Downie and Brown (2010, 325), officials from developing countries, with the support of NGOs, started demanding in the early 1990s that “industrialized countries reduce their share of what they call ‘environmental space’ – the use of the earth’s limited natural

resources and environmental services – and permit developing countries to use more of that environmental space to raise their living standards”. Since the 1992 Earth Summit, this idea of CBDR of North and South has “become a feature of all post-Rio environmental negotiations, including the Convention to Combat Desertification, the Cartagena Protocol on Biosafety, and the climate change and chemicals conventions” (Chasek et alia, 2010, 325-327). The CBDR is also included in the Law of the Sea Convention and the Convention on Biological Diversity, which demonstrates that “the CBDR principle has come to play a pivotal role in international environmental law as it relates to global concerns” (Brunnée and Toope, 2010, 152). Many environmental norms are different from other norms in the sense that they impose differential obligations on states. For example, most human rights regimes (e.g. torture, genocide and so on) do not include the CBDR principle, because these norms “are too morally unambiguous to admit exceptions (openly) - to agree for example, that some torture is acceptable until the party in question reaches a higher level of economic development” (Stone, 2004, 282). This different treatment of states, according to their different levels of economic development, is a key point that sets environmental norms apart from other norms. This is also why the “[c]onstruction of the climate change regime was predicated on the recognition of the ‘[CBDR]’ of its members and the controversial duty of the developed Annex I parties to take the initial steps in greenhouse gas emissions reduction” (Vogler, 2005c, 60).<sup>80</sup>

While the CBDR principle and the idea of non-uniform obligation for states under international environmental law is not new, the UNFCCC constitutes the “first

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<sup>80</sup> The CBDR principle in many international environmental agreements undeniably imposes a duty on industrialized countries to provide leadership and tackle issues of environmental pollution first. This also justifies my focus in the previous chapter on the question of the EU’s leadership as a group of industrialized states and how to operationalize the notion of leadership, which I linked to a high degree of ‘policy coherence’.

unambiguous adoption by a multilateral agreement of [CBDR], in those words” (Stone, 2004, 279). The UNFCCC’s preamble gives the following justification for the CBDR:

Noting that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs (Intergovernmental Negotiating Committee for a Framework Convention on Climate Change, 1992).

Following up on this point, Article 3.1 of the UNFCCC states:

The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof (Intergovernmental Negotiating Committee for a Framework Convention on Climate Change, 1992).

However, the UNFCCC regime has reached a stalemate in the last ten years and Stone (2004, 280) points out that “[d]isputes over the scope of the [CBDR] are a primary cause”. In a legal analysis, French (2000, 54) argues that the CBDR principle in the UNFCCC requires a leadership role of industrialized countries in tackling global environmental issues, which “seems, to some extent, to be independent of the future trends in environmental degradation”. French goes on to say that the only way to prevent a North-South split would require “a substantial increase in the transfer of financial and technological aid from North to South that will allow developing States to both improve their socio-economic situation and reduce their future negative impact upon the environment”. However, this legal link in the UNFCCC between the leadership of industrialized states and different – let alone diminished – obligations for developing states remains contested in industrialized states. Particularly in the US, “the question whether ‘historical contributions’ of states to greenhouse gas concentrations in the

atmosphere are a ground for accordingly differentiated commitments, remains highly contentious” (Brunée & Toope, 2010, 159).<sup>81</sup>

Important political differences continue to exist regarding how “the principle of CBDR should impact global environmental policy both in general and on specific issues” (Chasek et alia, 2010, 325). One of these issues is finding an agreement on mitigation targets, which distributes the ‘pain’ of necessary emission reductions in an effective, efficient, but also fair manner between industrialized and developing states. However, as Okereke (2008, 111) points out, the CBDR principle remains “a very ambiguous concept – one that is extremely difficult to unravel in terms of its conceptual relationship with equity and international distributive justice” allowing “both the developed and developing states [to] hide behind the CBDR concept to push for disparate policies in the context of the climate regime”. For example, developing states interpret the CBDR principle as an application of the Polluter Pays Principle. In other words, “the burden imposed by climate change should be shared according to the proportion to which each state has contributed to the problem” (Okereke, 2008, 111). In sharp contrast, states from the North “resisted any move by developing countries to document that their leadership role in tackling climate change was based directly on the notion of justice as bearing responsibility for past action”, but rather “interpret the CBDR as meaning that the international burden imposed by climate change should be shared on the basis of capacity and the ability to shoulder the responsibilities involved” (Okereke, 2008, 112). Even though enshrined in the UNFCCC, “the treaty text left the underlying scientific and

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<sup>81</sup> French (2000, 37) shows how this unease with the CBDR principle in the US goes back to the negotiation of the 1992 Rio Convention, where the US issued an interpretative statement regarding Principle 7 of the Rio Convention, which stated that the CBDR principle does not “imply a recognition [...] of any international obligation [...] or any diminution in the responsibility of developing countries”, which French argues goes against the actual text of the Convention: “[I]f the reference to [CBDR] in the text is to mean anything, it must imply that developing countries have different, and to that extent, diminished obligations”.

normative controversies unresolved” and the negotiations on a post-2012 international framework on climate change “provide a fascinating opportunity to explore how the objective [of the UNFCCC] and CBDR have shaped parties positions and, in turn, how regime participants sought to clarify and shift the meaning of these norms” (Brunnée and Toope, 2010, 130).

This lack of clarity about the meaning of the CBDR principle speak to Legro’s (1997) Constructivist notion of norm robustness. The fundamentally different interpretations of the North and South undermine the specificity, durability and concordance and as a result the robustness of global mitigation norm. The negotiations after the approval of the Bali Roadmap by the 13<sup>th</sup> Conference of Parties in 2007 reflect this. Ever since the start of the negotiations, little progress has been achieved in making the global mitigation norm more specific: Chinese diplomats continue to insist that “nationally appropriate mitigation actions by developing country Parties” remain voluntary and will not be enshrined in a legally binding treaty after 2012, whereas the position of industrialized states including the EU emphasizes that developing states also need to commit to legally binding targets to limit their emission increases (Conference of the Parties, 2007). Within the UNFCCC negotiations, all Parties agree that climate change is an urgent challenge, but few – except the EU – have put forward science-based mitigation targets for the period after 2012. As for the durability criterion, questions remain about the American commitment to the UNFCCC process and the prospect of a ratification of a post-2012 treaty on climate change by a ‘sceptical’ Senate. Similarly, many doubt the political willingness in China of making major improvements in energy efficiency, while experiencing rapid economic growth. Last but not least, there continues to be no agreement about how to distinguish between the so-called ‘real’ developing states and the developing states with emerging economies. Efforts to relax the rigorous distinction

between industrialized and developing states have not brought a compromise any closer, on the contrary. Developing states continue to staunchly defend the continuation of the Kyoto Protocol, as this would guarantee this distinction after 2012.

How do these different interpretations of the CBDR principle – the lack of norm robustness – play out in global climate change negotiations and the bargaining on mitigation targets? One of the surprising elements in global environmental negotiations is how stable this divide between North and South has remained since the first multilateral conference on the environment in 1972 in Stockholm, the United Nations Conference on the Human Environment. Depledge (2006, 3) talks about the “ossification” of the climate change regime:

The political dynamics of the climate change regime revolve very strongly around longstanding political fissures—notably the “north/south divide” between industrialized and developing countries—based on ideological and historical differences, rather than special interests or circumstances relative to climate change.

Developing countries are gathered in the G-77 plus China.<sup>82</sup> Industrialized states are grouped together as Annex I countries, as officially recognized under the UNFCCC. However, there is considerable diversity within these two broad groupings of North and South. The G-77 plus China incorporates four subgroups, whose economic interests and vulnerability to climate change vary widely. First of all, there is the Alliance Of Small Island States (AOSIS), which are most vulnerable to the impacts of climate change such as rising sea levels. Secondly, there are the Least-Developed Countries, mainly in sub-Saharan Africa, which will be among the countries most impacted by a warmer climate in terms of increased desertification and negative impacts on food production. While claims of potential ‘climate wars’ are likely overstated (Buhaug, 2010), these states have

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<sup>82</sup> Founded in 1967, the G-77 and China helps to coordinate the negotiating positions of its 131 members, all of which are developing countries.

nonetheless limited financial and technological capacity to help their populations adapt to a changed climate. Thirdly, there are the rich oil-exporting countries, organised in the Organization of Petroleum Exporting Countries (OPEC), which demand compensation for their expected revenue losses from decreased oil exports in negotiations on climate finance and help to diversify their economic structure (Mouawad & Revkin, 2009; Vidal, 2010). Last but not least, there is China, whose negotiators often support the positions of the G-77. China is now the world's largest emitter of CO<sub>2</sub>, but China's diplomacy continually emphasizes its status as a developing country in light of the very uneven levels of development within China. The Chinese Foreign Affairs Ministry even started a diplomatic outreach effort to persuade industrialized states of the enormous challenges involved in China's economic development (Zhang, 2010). In conclusion, Depledge (2006, 4) argued that except for a couple of specific issues, "[t]he legacy of colonial exploitation, uneven development and imbalance of power throughout the globe trumps climate-specific indicators (such as emissions data, vulnerability, energy intensity, patterns of land use) in shaping political alliances in the climate change regime".

On the other side of the debate, industrialized countries also vary considerably on climate-specific indicators, but largely share a common position on many of the key issues. This group agrees that emerging economies among developing countries like China must take on a legally binding commitment in a future climate treaty. Under such an obligation, for example, China would reduce the carbon intensity of its rapidly developing economy and let its emissions peak as soon as possible. This Annex I group can essentially be split in two groups. First of all, there is "a division between the EU and other industrialized countries" (Depledge, 2006, 4). The EU and its 27 Member States have been pushing other countries – developing as well as other industrialized states – to increase their levels of ambition and demonstrate leadership on the issue of climate

change. Secondly, a loose coalition of non-EU industrialized states formed following the adoption of the Kyoto Protocol. This group is often referred to as the Umbrella Group, which usually includes Australia, Canada, Japan, New Zealand and the United States. What brings these countries together is their lack of political action on curbing their rising emissions and their non-compliance with the targets agreed under the Kyoto Protocol. The US occupies a special position within this group for two reasons: Firstly, George W. Bush decided in 2001 that the US would not ratify the Kyoto Protocol and secondly, the US was until recently the world's largest emitter of CO<sub>2</sub>. In that sense, the US plays in a league of its own.

Yet, despite the increasingly diverse make-up of these coalitions, negotiations on climate change remain firmly rooted on a north/south axis, even though some commentators like Wapner (2003, 5) have seen some political movement, even claiming that South and North. The US in particular allows environmental concerns to fall by the wayside in favour of economic development. The Global South is growing more concerned about the impacts of environmental pollution and climate change in particular.

### **V.3. The European Union's climate diplomacy before, during and after the Copenhagen climate summit**

#### **V.3.1. Scientific underpinnings for the European Union's position**

To avoid dangerous climate change, widely accepted as 2 degrees of increase in global average temperatures, GHG concentration levels in the atmosphere need to be stabilised at maximum 450ppm CO<sub>2</sub>eq. Achieving such stabilisation would give a 50% chance of stabilising temperatures at that level. In 1996, the EU was one of the first actors in the international debate to commit to this target (see Council of the EU, 1999;

European Commission, 2005b, 3) and this target has been included in the conclusion of the G-8 and the UNFCCC framework via the Copenhagen Accord. The EU's negotiation position is explicitly tied to the UNFCCC objective. How is this goal to be achieved according to the EU?

The CBDR principle is central to the EU's proposals for the Copenhagen Conference EU, as it recognizes that “[d]iffering national circumstances and stages of development require differentiated actions and levels of ambition” (European Commission, 2009e, 5; Brunnée & Toope, 2010, 158). More concretely, the EU committed to one of the scenarios that was elaborated in the Intergovernmental Panel on Climate Change's (2007a, 776) Fourth Assessment Report, namely the often referred to 'Box 13.7'. This Box 13.7 is also referenced in the Bali Action Plan, adopted by the 13<sup>th</sup> Conference of Parties in December 2007 in Bali, Indonesia. The 13<sup>th</sup> Conference of Parties (2007) agreed that “deep cuts will be required” to avoid dangerous climate change and emphasized the “urgency to address climate change”, but failed to agree on specific numbers such as the specific 25-40% reduction targets for Annex I Parties as suggested by the EU (Jowit, Davies & Adam, 2007).

**Table 1: Box 13.7: The range of the difference between emissions in 1990 and emission allowances in 2020/2050 for various GHG concentration levels for Annex I and non-Annex I countries as a group (IPCCa, 2007, 776).**

<b>Scenario category</b>	<b>Region</b>	<b>2020</b>	<b>2050</b>
A-450 ppm CO <sub>2</sub> -eq	Annex I	-25% to -40%	-80% to -95%
	Non-Annex I	Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia	Substantial deviation from baseline in all regions
B-550 ppm CO <sub>2</sub> -eq	Annex I	-10% to -30%	-40% to -90%
	Non-Annex I	Deviation from baseline in Latin America and Middle East, East Asia	Deviation from baseline in most regions, especially in Latin America and Middle East
C-650 ppm CO <sub>2</sub> -eq	Annex I	0% to -25%	-30% to -80%
	Non-Annex I	Baseline	Deviation from baseline in Latin America and Middle East, East Asia

In line with the principle of CBDR, the Intergovernmental Panel on Climate Change is clear that a major decrease of emissions is needed from industrialized countries in the range of 25% to 40% reductions by 2020 and a “substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally Planned Asia”.<sup>83</sup> These figures are also referenced in the EU’s negotiation position ahead of the Copenhagen conference (Council of the EU, 2009, 2). Climate scientists have updated this notion of a “substantial deviation”, because the Intergovernmental Panel on Climate Change’s (2007c) Fourth Assessment Report relied on figures from before the end of 2005. These figures “do not account for the recent rapid growth in emissions” and climate scientists like den Elzen and Hoehne (2008, 249 and 271) consider it necessary to be more specific about

<sup>83</sup> Africa is not mentioned, because African countries contribute only 3% of global emissions while accounting for 15% of the world’s population. Box 13.7 is aimed at emerging economies like Brazil, China and India.

emission reduction targets for developing countries and recommend that “emissions of non-Annex I countries as a group have to be below the baseline roughly between 15% to 30% for 450 ppm CO<sub>2</sub>-eq”.<sup>84</sup> This is also the “recent scientific report” that the European Commission (2009e, 5) referred to support its demand that developing countries, as a group, will need to limit the rise in their GHG emissions through nationally appropriate actions to 15-30% below baseline by 2020.<sup>85</sup> However, more often than not, climate change negotiations have been “unable to process and act upon new scientific information in an effective manner”, as Depledge (2006, 6) already observed with the Intergovernmental Panel on Climate Change’s Third Assessment Report in 2001. The story of the Intergovernmental Panel on Climate Change’s long awaited Fourth Assessment Report, released in 2007, was no different, as I will outline below. The challenge for negotiating future mitigation targets is to move away from “the Kyoto caps [which were] politically agreed upon figures” and to relate mitigation targets more closely to GHG concentrations in the atmosphere, temperature increases (Steurer, 2003, 357).

The EU expected to lead the way in Copenhagen with its two-prong strategy to promote science-based mitigation targets in combination with its offer to work towards finance requirements for adaptation and mitigation actions in developing countries of roughly EURO 100 billion per year by 2020 (European Commission, 2009d). With these two elements and its conditional offer to move up to a 30% mitigation target for the EU, EU leaders hoped to play a leadership role and negotiate an ambitious international

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<sup>84</sup> For example, “Chinese fossil fuel CO<sub>2</sub> emissions have grown a remarkable 79.2 percent since 2000 alone”. This is an intensification of a long-term trend in China of ever increasing emissions: “From 1970 to 1996, China’s fossil fuel CO<sub>2</sub> emissions grew at an annual rate of 5.3 percent” (Boden *et alia*, 2009 quoted in Chasek *et alia*, 2010, 183).

<sup>85</sup> Other Annex I countries have criticized this EU position, because it fails to outline its baseline scenario for China. This leaves open the question how much the Chinese economy will grow between 2005 and 2020 under a business-as-usual scenario (Interview Japanese bureaucrat, January 29, 2010).

agreement.

### V.3.2. The EU's position in Copenhagen: Caught between the US and China

The EU's reliance on what it considers to be transparent and reliable data as foundations for its official positions is not new, but it has failed to pay diplomatic dividends in past negotiations. In her analysis of earlier climate change negotiations, Depledge (2006, 4-5) pointed out that "the EU has repeatedly made the mistake of believing itself to be acting sensitively by presenting what it perceived as restrained and subtle proposals". However, the deep mistrust and the political entrenchment between industrialized and developing states explain how such 'reasonable' proposals meet with knee-jerk reactions from the G-77, "which fears the proposals are aimed either at weakening industrialized country commitments, or at imposing new obligations on the developing world" (Depledge, 2006, 8-15).

The institutional classification of countries into the two main categories of Annex I (industrialized countries) and non-Annex I (mostly developing countries) parties is not only an institutional classification that was evident in 1992, but continues to represent a profound difference in how North and South frame the issue of climate change. On the one hand, Annex I states consider the fight against climate change primarily as an urgent environmental challenge that needs to be tackled in the most efficient way possible, which explains their concern with the carbon-intensive economic growth of emerging economies. On the other hand, developing countries perceive the fight against climate change and the need to reduce global emissions as an issue that profoundly affects their economic development potential. Countries like China with emerging economies are particularly sensitive to this point, given the difficulty that industrialized states have faced to reduce their emissions over the last 20 years despite their superior

technological, financial and administrative capabilities. Emerging economies resist any pressure to take on any legally binding emission reduction commitments out of fear of crippling their economic growth. This reluctance also includes emission reduction targets which would commit their economies to become more energy efficient and as a result less carbon intensive.<sup>86</sup> Or in the words of Todd Stern (2009) in his first address to a UNFCCC meeting in Bonn:

Let me say bluntly that the tenor of negotiations in the formal UN track has been difficult. North-South rhetoric still permeates the discussions, as it has for the past seventeen years. Developing countries tend to see a problem not of their own making that they are being asked to fix in ways which, they fear, could stifle their ability to lift their standards of living. Developed countries tend to see an unforgiving problem with potentially grave and irreversible consequences and that cannot be solved without the full participation of developing countries – particularly China and the other emerging market economies. According to the International Energy Agency, 97 percent of the projected increase in global emissions between now and 2030 will come from developing countries. And yet we must find a way to bridge this developed/developing country divide, which is still the heart of the struggle for an international solution.

In Copenhagen, this divide was crystallized in the differing positions between the US and China. While the US did not spell out in great detail its negotiation position ahead of the Copenhagen summit, the failure of the Clinton administration to ratify the Kyoto Protocol in the US Senate clearly informed the approach of the Obama administration. Mindful of these lessons, the State Department was aware that the US could only sign on to an international agreement that is in line with the demands set out in the 1997 Byrd-Hagel Resolution of the US Senate. This resolution makes clear that new mitigation targets for the US and other Annex I Parties are out of the question, “unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance

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<sup>86</sup> Energy intensity and carbon intensity are not interchangeable, but are nonetheless closely linked, particularly in countries like China where a fossil fuel like coal occupies a dominant position in China’s energy supply.

period” (Byrd & Hagel, 1997). In other words, the US is focused on the legal form of a post-2012 agreement, whose “*legal* nature (i.e. its binding nature) must be equivalent for all parties”, including China (Davey *et alia*, 2010, 27). Moreover, legally binding mitigation targets for e.g. China are insufficient by themselves. Following a tactic employed vis-à-vis the Soviet Union in Cold War arms control negotiations, the US approach is one of ‘trust but verify’: The US requires for instance that Chinese commitments to targets be open to international scrutiny or, in the jargon of the climate change negotiations, ‘MRV’, which stands for measurable, reportable and verifiable. Within the US, there is a great emphasis on the need for China to be more transparent and accountable about its compliance with international commitments. Concern about the veracity of Beijing’s environmental rhetoric is not entirely misplaced, “because even when Beijing sets ambitious targets to protect the environment, local officials generally ignore them, preferring to concentrate on further advancing economic growth” (Economy, 2007).<sup>87</sup> This MRV requirement is unlikely to create a lot of goodwill for an ambitious agreement on the part of China. China is sensitive about outside scrutiny of its domestic activities. Moreover, the failure of the Obama administration to produce a meaningful result in their push for domestic climate change legislation undermines its diplomatic efforts to convince China to reduce its emissions.<sup>88</sup>

Clearly, the US emphasizes the commonality of obligations of *all* Parties under the UNFCCC’s CBDR principle. China is on the other side of the spectrum. Ahead of Copenhagen, China identified some basic principles that would guide its negotiation strategy (NDRC-China, 2009). For China, the CBDR principle implies an obligation for industrialized states to demonstrate leadership on many issues:

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<sup>87</sup> See also Economy (2006, 2009).

<sup>88</sup> The proposals that were tabled by US Senators John Kerry, Joseph Lieberman and Lindsey Graham, which President Obama supports, have been stalled in the Senate (see Lizza, 2010).

Developed countries shall take responsibility for their historical cumulative emissions and current high per capita emissions to change their unsustainable way of life and to substantially reduce their emissions and, at the same time, to provide financial support and transfer technology to developing countries. Developing countries will, in pursuing economic development and poverty eradication, take proactive measures to adapt to and mitigate climate change (NDRC-China, 2009).

For China, the need to determine binding reduction targets for industrialized states for the second commitment period under the Kyoto Protocol was a key principle. China put forward a steep mitigation target for Annex I Parties, namely “to reduce their GHG emissions in aggregate by at least 40% below their 1990 level by 2020” (NDRC-China, 2009). China also made clear that any action on climate change by developing countries requires the financial and technological assistance from industrialized states: “The fulfillment of commitments by developed countries to provide financing, technology transfer and capacity building support to developing countries is a *condition sine qua non* for developing countries to effectively mitigate and adapt to climate change [emphasis in original]” (NDRC-China, 2009). Using language from the Bali Roadmap, China is willing to engage in Nationally Appropriate Mitigation Actions, which it insists are different from the Quantified Emission Limitation and Reduction Obligations of industrialized states in four ways (NDRC-China, 2009):

1. Such actions are “initiated by themselves, distinct from international legally-binding commitments of developed countries”.
2. Such actions are specific mitigation policies, actions and projects at the national level, “in line with their national circumstances and sustainable development strategies with the priorities identified by [developing countries] themselves”.
3. The “technology, finance and capacity building provided by developed countries in a measurable, reportable and verifiable way” need to play a central role in these actions.

4. “Only those actions enabled by measurable, reportable and verifiable support are subject to the ‘measurable, reportable and verifiable’ requirement”. China links international monitoring of Chinese emissions to financial aid for mitigation project in China, for instance Clean Development Mechanism projects. In other words, international scrutiny of ‘autonomous’ actions on reducing emissions – undertaken without international financial or technological support – is not welcome.

How does China justify this insistence on the old institutional framework of the UNFCCC and the Kyoto Protocol and its reluctance to commit to internationally binding targets? Premier Wen Jiabao (2008, 4) returned to familiar G-77 rhetoric, claiming that climate change is not just an environmental, but ultimately a development issue for China:

It is not in the common interest of the mankind [sic] to address climate change at the cost of development, or to blindly pursue economic growth in disregard of the threats of climate change. The current climate change is mainly caused by the accumulated emissions by the developed countries over many years. Developing countries, especially the least developed ones are weak in climate change adaptation, thus it is unfair that they have to bear its serious consequences. The developed countries should change their unsustainable consumption mode, significantly reduce greenhouse gas emissions and help the developing countries to embark on a path of sustainable development that is suited to their own national conditions and to strike a balance between pursuing economic growth and tackling climate change.

In a nutshell, this was the position that China held throughout the Copenhagen summit.

China emphasized its status as a developing country in global climate change negotiations. Chinese negotiators frequently repeated the following facts. First, 135 million people still live on less than one dollar a day and income disparities between urban and rural areas have continued to increase during China’s economic modernisation. Second, despite a growing recognition of the impacts of environmental pollution, sustained economic growth remains an urgent priority for Chinese policy-makers and an integral part of its strategy to reduce poverty (Heggelund, 2007, 159).

Third, according to the World Bank (2010) classification of countries on the basis of their Gross Domestic Product per capita, China is a lower middle-income country. This ranking helps to explain the self-perception of China “as a relatively weak, developing country, treated unequally in history by the colonialists and the imperialists, and thus feels the need to redress the injustice” (Geeraerts, 2007, 6). China’s Premier Wen Jiabao (2009a) explicitly mentioned China’s status as a developing state during his address to the plenary conference in Copenhagen. China views itself as an emerging economy, whose emissions have only increased in the last twenty years. Moreover, its per capita emissions may be rising, but are still only a quarter of American per capita emissions and only half of the EU’s per capita emissions. Given the very recent upward trend in China’s emissions, the historical responsibility of industrialized countries is taken very seriously. As one official from China noted:

During the last 155 years (1850-2005), the world has discharged 1,122.2 billions tons of CO<sub>2</sub>. Developed countries discharged 806.5 billion tons, about 72% of the total. Climate change did not happen today, but is an accumulated phenomenon. Therefore, we must take into account historic responsibility. It is very serious. In discussions with other diplomats, I am of the view that China is not the biggest emitter, because that is historically [incorrect]. The EU accounts for about one third of the whole CO<sub>2</sub> amount, from almost 200 years ago (Author’s interview, Mission of the PRC to the EU official, January 13, 2010).<sup>89</sup>

China’s strong feelings about the West’s historical responsibility for creating the problem of climate change are expressed as a relentless emphasis on the principle of CBDR in the UNFCCC, the Kyoto Protocol and the Bali Roadmap.<sup>90</sup> So, China uses an “opportunistic” strategy and presents itself, on the one hand, as a leader of the G-77

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<sup>89</sup> This 72% figure of the European and North-American share of cumulative emissions are accurate and can also be found in the Stern Review (Stern, 2007, xi).

<sup>90</sup> For example, article 10 of the Kyoto Protocol states that all Parties – industrialized countries as well as developing countries – should introduce national greenhouse gas inventories and climate change programmes, all the while:

taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, without introducing any new commitments for Parties not included in Annex I.

alliance of developing countries by resisting any commitments under a post-2012 Copenhagen agreement, while simultaneously joining agreements that, for example, “allow China the benefits of an increasing number of [Clean Development mechanism] projects focused on renewable energy” (Kasa *et alia*, 2008, 121-122).<sup>91</sup>

The EU’s position falls somewhere between these two ‘extremes’: It shares China’s attachment to the Kyoto Protocol and invested much in the UNFCCC multilateral negotiating framework. For example, the EU Emission Trading System generates the most demand for offsets under the Clean Development Mechanism. However, the EU also shared the US demand for specific and binding mitigation commitments from emerging economies. The EU’s position differed from both the Chinese as well as the American position in its “mental model of a climate regime”. The EU’s pursuit of a “grand deal” based on a top-down Kyoto-style agreement with coordinated emissions control from all major emitters differed substantially from the model favoured by other major emitters, namely “a model that emphasizes bottom-up pledges, ‘small-n’ negotiations and a focus on monitoring and reporting mechanisms” (Haug & Berkhout, 2010, 25). The US had already initiated such meetings by organizing the Major Economies Forum on Energy and Climate from 2009, outside the UNFCCC framework.

Having established the different positions of the US, China and the EU on some of the key issues in the multilateral negotiations on climate change, the next sections elaborate how these differences played out in the preparatory conferences for the COP15 in Copenhagen, the Copenhagen climate summit itself and its immediate aftermath.

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<sup>91</sup> China’s more positive engagement with international flexibility mechanisms under the UNFCCC and climate change discussions outside the UNFCCC framework will be covered in the next chapter.

### V.3.3. Events at the 2009 preparatory conferences before the Copenhagen 15<sup>th</sup> Conference of the Parties

After the eight years of obstructive positioning by the Bush administration, the advent of the Obama administration promised some 'hope' for 'change' for the ongoing negotiations on climate change. During his first intervention in March 2009, a speech by President Obama's climate envoy Todd Stern (2009) met with applause: "[W]e are very glad to be back, we want to make up for lost time, and we are seized with the urgency of the task before us". However, this optimism did not last long. By the time the Bangkok preparatory conference ended in September 2009, the old divides between North and South had resurfaced and dashed the hopes for an ambitious agreement in Copenhagen. A quote from China's special representative on climate talks ambassador Yu Qingtai sums up the growing frustration among developing states:

The reason why we are not making progress is the lack of political will by Annex 1 [industrialized] countries. There is a concerted effort to fundamentally sabotage the Kyoto protocol. [...] They are introducing new rules, new formats. That's not the way to conduct negotiations (quoted in Vidal, 2009b).

Much of the discontent had focused on efforts by Annex I parties like the US, Canada, Japan, Australia to replace the Kyoto Protocol, which is the only legally binding instrument that constrains the emissions in industrialized countries. China's delegation took issue with the following statement by chief US negotiator Jonathan Pershing:

We are not going to be in the Kyoto protocol. We are not going to be part of an agreement that we cannot meet. We say a new agreement has to [be signed] by all countries. Things have changed since Kyoto. Where countries were in 1990 and today is very different. We cannot be stuck with an agreement 20 years old. We want action from all countries (quoted in Vidal, 2009f).

For the G-77 and China, the continuation of the Kyoto Protocol after 2012 is non-negotiable. The EU spokesperson Karl Falkenberg clarified that the EU's position was close to the US position on the need for a single, new treaty for the post-Kyoto period (Vidal, 2009f).

In November 2009, negotiations in Barcelona were suspended for 24 hours “after 55 African countries, in an unprecedented show of unity, called for a suspension of all further negotiations on the Kyoto protocol until substantial progress was made by rich countries on emission cuts” (Vidal, 2009a). Between the start of 2009 and the last round of negotiations, the Chair’s negotiation text had grown between the Bonn meetings in March 2009 and the Bangkok meeting in September 2009 from about 50 pages to almost 200 pages. As finding compromises on specific issues proved difficult, many delegations had proposed their own amendments to key passages in the negotiation text, which resulted in a heavily bracketed text.<sup>92</sup> For example, the important passage on the definition and scope of the mitigation acts by developing states included almost 30 proposals (paragraphs 22 to 50), all of which contained brackets (Chair AWG-LCA, 2009).

During 2009, a number of parallel meetings occurred, where countries put forward their own negotiation texts. Of particular relevance is a draft by the BASIC countries, entitled ‘Copenhagen Accord’, which was leaked to the French newspaper *Le Monde* (Kempf, 2009).<sup>93</sup> China had invited Brazil, India and South Africa to Beijing at the end of November 2009 to coordinate their positions ahead of the Copenhagen summit with this text as a result (Dasgupta, 2009). The draft can be considered as lacking in ambition, as it does not include any specific, legally binding targets for industrialized nor for developing countries. For the first group, the draft suggests updating commitments

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<sup>92</sup> The brackets in a negotiation text indicate the language in the texts where disagreements remain: “The aim of the negotiation is thus to work on outstanding language, finding compromise text that can lift – or remove – the brackets” (Depledge, 2005, 153).

<sup>93</sup> The BASIC countries are a group of states with emerging economies, composed of Brazil, South Africa, China and India. Since 2009, these states have started informally coordinating their positions ahead of major international meetings, in particular ahead of UNFCCC meetings.

under the Kyoto Protocol, but leaves open how ambitious such targets should be. For the industrialized states that did not ratify the Kyoto Protocol, specifically the US, the BASIC countries suggest that their targets should be “comparable” to the targets of other industrialized states. This echoes the EU’s conditional offer to increase its mitigation target to 30% to contribute to a global agreement, if other industrialized states commit to comparable emission reductions. A second and important precondition for the EU to increase its target is the requirement “that developing countries contribute adequately according to their responsibilities and respective capabilities” (Council of the EU, 2009). This is the main point of difference between the EU and the BASIC countries. In the latter’s position, the language on the commitments for developing countries is even weaker: “Non-Annex I Parties to the Convention may, based on their national circumstance and in the context of sustainable development, take mitigation actions”. This draft makes a clear distinction between such “nationally appropriate mitigation actions supported and enabled by developed countries in terms of technology, financing and capacity building” and “autonomous national mitigation actions taken with the support of national resources of developing countries themselves” (NDRC-China, 2009). According to the BASIC countries, these two sets of actions fall under different regimes: Whereas the former will be registered in an international registry (for example with the UNFCCC Secretariat), the latter “will be subject to auditing, supervision and assessment respectively [sic] conducted by developing countries themselves in accordance with their national rules and procedures, taking into account any guidelines the Conference of Parties may elaborate” (NDRC-China, 2009). It is clear that China and the other BASIC countries stop short of incorporating their Nationally Appropriate Mitigation Actions in an international agreement with concomitant monitoring procedures.

#### V.3.4. Some 'hope' for 'change' before the Copenhagen conference

The positions of the world's largest emitters seemed clearly irreconcilable. Nonetheless, there was some optimism ahead of Copenhagen, as both China and the US seemed determined to move decisively towards reducing emissions. Chinese officials repeated their willingness to commit China to emission-intensity targets, even though these targets would remain purely domestic targets, not binding under international law. China's premier Wen Jiabao (2008, 1) stated that his government had set an "obligatory target in the eleventh five-year program on national economic and social development to reduce energy intensity by 20% in five years [i.e. by 2010 with 2005 as baseline year]" (Wen Jiabao, 2008). For China's twelfth Five-Year-Programme, Chinese President Hu Jintao (2009) promised a decrease by a "notable margin" in the carbon intensity of China's economy by 2020 in his speech to the UN General Assembly (Black, 2009). Finally, in November 2009, China's State Council announced that China was committed to reducing its carbon dioxide emissions per unit of Gross Domestic Product, or carbon intensity, by 40 to 45 percent of 2005 levels by 2020 (Wong, 2009). This pledge came on the back of an announcement by the Obama administration of a 17% cut in emissions by 2020, also using 2005 as the baseline year. While this is nowhere near the Chinese demand for a 40% cut in emissions compared to 1990, the promise of a 17% emission reduction reflects only the initial emission target for the US. As US climate envoy Todd Stern (2010) pointed out in his submission to the UNFCCC Secretariat under the Copenhagen Accord: "The pathway set forth in pending legislation would entail a 30% reduction in 2025 and a 42% reduction in 2030, in line with the goal to reduce emissions 83% by 2050".

Even though the prospects for success at Copenhagen looked slim, expectations were

high, particularly as virtually all world leaders had committed to attending the conference, including all the heads of the states of the world's largest emitters. Moreover, other emerging economies also had announced their intentions to increase their ambitions, which potentially could dampen the divide between North and South. For example, Brazil committed to a range of actions, particularly in the area of deforestation, which it anticipated would "lead to an expected reduction of 36.1% to 38.9% regarding the projected emissions of Brazil by 2020" using the 2005 baseline year (Brazil, 2010). Together with the Chinese announcements, there was some hope that this might also lead the US to increase its level of ambition.

#### V.3.5. Events during the 15th Conference of the Parties in Copenhagen

However, these hopes quickly faded on the second day of the Copenhagen summit, when the infamous 'Danish proposal' of the Chair of the Conference was leaked. The proposal from the Danish presidency of the conference tried to replace the heavily bracketed 200-page negotiation text and provide a new, more succinct basis for the COP15 to negotiate (Vidal, 2009c). However, the Danish chair of the Conference Connie Hedegaard – since 2010, the new EU climate commissioner – exceeded the usual mandate of the Chair in UNFCCC conferences and went well beyond the usual tidying up exercise of unwieldy negotiation texts. Instead, the Danish proposal presented the delegations with "a comprehensive compromise on all key political issues" (Depledge, 2005, 158). Unfortunately, there had been insufficient consultation on the Danish proposal, and particularly no involvement of developing states. The proposal suggested a 'compromise', where there was only disagreement between North and South, namely with regard to binding mitigation targets for emerging economies. These elements prompted developing countries to walk out of the main negotiating session (Vidal,

2009c). The G-77 plus China objected in particular to paragraphs 9 and 10 of the 'Danish proposal'. These read as follows:

“9. The developing country Parties, except the least developed countries which may contribute at their own discretion, commit to nationally appropriate mitigation actions, including actions supported and enabled by technology, financing and capacity-building. The developing countries' individual mitigation action could in aggregate yield a [Y percent] deviation in [2020] from business as usual and yielding their collective emissions peak before [20XX] and decline thereafter.

10. Attachment B reflects individual commitments to nationally appropriate mitigation actions by developing country Parties. Developing country parties which have not reflected their contributions at COP15 should do so before [XX], except least developed countries. A developing country Party may subsequently amend its national contribution to register additional national appropriate mitigation actions which increase its overall mitigation outcome” (see Vidal, 2009c).

The notion that developing countries and the emerging economies in particular should commit to let their emissions peak before a specific year and that developing countries should commit to individual, legally-binding mitigation targets in the absence of support from Annex I Parties like adaptation finance, capacity-building or technology transfer was a bridge too far for the G-77 plus China. The timing could not have been worse and the incident soured the mood from the very start of the conference. The G-77 plus China felt that the Danish proposal compromised the CBDR principle and perceived it as an attempt to “divide developing countries by exempting some developing countries from such a new mitigation obligation” (G-77 plus China, 2009, 5).

The next day, the small-island state of Tuvalu developed its own proposal for a protocol to the UNFCCC in order to inject some new momentum in the negotiations (Vidal, 2009d). The Tuvalu proposal sought to establish a single legal framework for all Parties to the UNFCCC, which would have meant abandoning the Kyoto Protocol. It does not come as a surprise that Tuvalu's proposal was mainly focused on adaptation and finance issues, which also explains why other small-island states and some sub-Saharan African states also supported this proposal as a new basis. Setting “the survival

of all nations” as one of the objectives for the proposed protocol, it also tried to replace the 2 degrees target with a 1.5 degrees target, which would require a stabilisation of GHG concentrations in the atmosphere at 350ppm (Tuvalu, 2009). However, the draft said little about mitigation actions. The Tuvalu proposal maintained the sharp distinction between Annex I Parties with binding Quantified Emission Limitation and Reduction Objectives and developing countries with voluntary Nationally Appropriate Mitigation Actions. The draft does not mention any specific mitigation targets or peak years, after which emissions should decline. Yu Qingtai, China’s Special Representative on Climate Change expressed understanding for the frustration of small island states, but with following caveats:

Although China’s national circumstances or the basic situation and conditions of China are largely different from those of small island countries, we are all developing countries. On the issue of responding to climate change, we are all the victims of the global warming caused by developed countries. As to the [Tuvalu proposal], we first need to make clear why small island countries have such concerns. The fundamental reason for their concerns is because of the lack of movement of developed countries in tackling climate change. [When it comes to] asking developed countries to fulfil their commitments, to translate their commitments into actual actions, the developing countries are in a highly unanimous position. In our specific understanding of how to achieve such change, we might have some differences. Some countries may consider that we will address this problem [of the gap between commitments and actual action in developed countries] by having a new legal document. However, China and many other countries feel that from history we learnt that no matter how many documents you adopt, without political will for action, you will not solve this problem. What we lack to tackle climate change is not legal documents but sincerity of action (Yu, 2009).

This tactical difference led to speculation about a possible rift within the G-77 plus China group, which could allow the US, the EU and other industrialized countries to isolate and put pressure on China to commit to more than voluntary actions. Despite this short-lived tactical difference, the group of the G-77 plus China remained united for the remainder of the conference in their ‘you first’ strategy of insisting on higher ambitions from

industrialized states.<sup>94</sup> The old divide between industrialized and developing countries, which had dominated the first week, resulted in a stalemate for the negotiations with little or no substantive progress being achieved on any of the major issues. At another press conference, Su Wei, China's lead negotiator, switched from Mandarin to English in order to convey the following message:

The largest part of the emissions originated from developed countries. The UNFCCC states that a relatively large amount of emissions come from developed countries and that the per capita emissions from developing countries are still low. Their emissions need to and will increase. The first and overriding priority is the development of the economy and the reduction of poverty. This is clearly stated in the UNFCCC. The current national conditions of China and the development stage of China require that the emissions of China will continue to increase in a period of time in order to develop the economy and reduce poverty in China (Su, 2009).

This rather blunt language was also intended to bring the debate back to China's key demand, namely a 40% emission reduction by industrialized states. However, towards the end of the first week, American negotiators had been able to steer the debate in the direction of transparency and MRV issues. According to Su Wei, the topic of MRV should be considered as a diversion:

Some people, including Todd Stern, raised the question of transparency. Their aim is not to get to know the circumstances or the efforts of China, but to confuse the fundamental differences between developed and developing countries in tackling climate change [i.e. the principle of CBDR]. And based on this principle, the UNFCCC and its Kyoto Protocol have also clearly set out the obligations and efforts that should be undertaken by developing and developed countries respectively. These were reaffirmed in the Bali Roadmap (Su, 2009).

For China, the CBDR principle implies a clear distinction between industrialized and developing states:

On a point of procedure, [China] can find a more balanced point to move ahead, but the principle behind CBDR is very clear and we cannot have any flexibility on that principle. [China] cannot accept a different

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<sup>94</sup> Comments made by US special envoy Todd Stern, who rejected "any notion of climate debt or reparations or anything of the like", further fanned the flames (Revkin & Zeller, 2009). China's Vice-Minister for Foreign Affairs He Yafei (2009) labeled other comments about adaptation finance made by Todd Stern as "either lacking of common sense or extremely irresponsible" (see Li & Sun, 2009).

interpretation of CBDR. CBDR is very clear, that developed countries and developing countries cannot be mixed up (Author's interview, Mission of the People's Republic of China to the EU official, January 13, 2010).

In the second week, the chairs of the two negotiation tracks, on the Kyoto Protocol and on Long-term Cooperative Action, put forward two new texts on which the negotiations could proceed. But by that time, the Conference was well into its second week with ministers and – on the last day – heads of state arriving in Copenhagen. It was only during the last day of the conference that events took a new turn. About 25 leaders of key countries were gathered in one room, hammering out, “pens in hand”, the final accord (Dimitrov, 2010, 20). Among those present were US President Obama and such European leaders as President Nicolas Sarkozy of France, Chancellor Angela Merkel of Germany, Prime Minister Gordon Brown of the United Kingdom, European Commission President Barroso and Swedish EU president Frederik Reinfeld. Delegates from emerging economies included China's deputy Minister of Foreign Affairs He Yafei, Indian Prime Minister Manmohan Singh and Prime Minister Meles Zenawi of Ethiopia, who represented African states, were also present.

Audio recordings from that last tense meeting were handed to reporters of the German Weekly *Der Spiegel* (Rapp *et alia*, 2010). These recordings give a unique ‘behind the scenes’ insight in these top-level negotiations and demonstrate that EU leaders were the only actors really pushing to have specific mitigation targets for 2020 or 2050 or a reference to a peak year for emission in the final agreement of the 15<sup>th</sup> Conference of Parties. British Prime Minister Gordon Brown and German Chancellor Angela Merkel can both be heard pleading to keep the specific targets in the text and to refer to some of the mitigation targets suggested the Intergovernmental Panel on Climate Change. A discussion on a 50% reduction of global emissions by 2050 led to tensions with the

BASIC countries, who had agreed among themselves to disagree with any specific targets, which could open the door to mitigation commitments for emerging economies. On the recordings, He Yafei can be heard to oppose such a reference to a reduction of global emissions, as it would include the emissions of developing states. China's refusal to agree to any specific targets – even resisting a specific target of an 80% emission reduction by 2050 for industrialized states – provoked a heated response by French President Nicolas Sarkozy. The Der Spiegel article sums up Sarkozy's intervention:

“The West, Sarkozy said, had pledged to reduce greenhouse gas emissions by 80 percent. "And in return, China, which will soon be the biggest economic power in the world, says to the world: Commitments apply to you, but not to us." Sarkozy, gaining momentum, then said: "This is utterly unacceptable!" And then the French president stoked the diplomatic conflict even further when he said: "This is about the essentials, and one has to react to this hypocrisy!" (Rapp *et alia*, 2010).

At this point, President Obama supported the EU's plea for mitigation targets for both industrialized and developing countries, but also signalled that time was running short to make any serious headway on key issues like mitigation. Sarkozy's outburst provoked a bitter response by Chinese deputy Foreign Minister He Yafei, who took issue with the accusation about hypocrisy:

I heard President Sarkozy talk about hypocrisy. I think I'm trying to avoid such words myself. I am trying to go into the arguments and debate about historical responsibility. People tend to forget where it is from. In the past 200 years of industrialization developed countries contributed more than 80 percent of emissions. Whoever created this problem is responsible for the catastrophe we are facing (Rapp *et alia*, 2010).

As this point, the meeting was suspended and President Obama was supposed to meet again with Wen, only to find out that Wen was already sitting down for talks with leaders from India, Brazil and South Africa. Obama quickly joined that meeting, where the Copenhagen Accord was drafted word for word by the leaders of these five countries. Once agreed between the US and the BASIC countries, the text was presented to leaders from the EU. Having been sidelined, EU leaders reluctantly signed off on the

Accord, but it remained well below the EU's strategic objectives for Copenhagen (Revkin & Broder, 2009).

The Copenhagen Accord accepts the scientific view that “the increase in global temperature should be below 2 degrees Celsius” and the need for cooperation to achieve “the peaking of global and national emissions as soon as possible” (Conference of the Parties, 2009). On the issue of MRV, two-yearly National Communications will communicate information about the mitigation actions by “Non-Annex I Parties”, “which will be subject to their domestic measurement, reporting and verification [...] with provisions for international consultations and analysis under clearly defined guidelines that will ensure that national sovereignty is respected” (Conference of the Parties, 2009). Only mitigation actions that receive international support will be subject to MRV “in accordance with guidelines adopted by the COP” (Conference of the Parties, 2009). The Copenhagen Accord also includes the figure – as originally proposed by the EU – of US \$100 billion for adaptation finance in developing countries, as well as “the crucial role of reducing emissions from deforestation” (Conference of the Parties, 2009). The Accord also includes the possibility of strengthening the UNFCCC's long-term goal to a maximum 1.5 degrees of warming.

This text was then sent to the plenary for adoption as a *fait accompli*. What ensued was 12 hours of discussion in the plenary session as to the who, how, why and what of this Accord. Many representatives of developing countries felt left out of this deal, which had been agreed behind closed doors between the US and countries with emerging economies. Venezuela, Bolivia, Cuba, Sudan, Tuvalu led the charge. Ultimately, the Copenhagen Accord was not officially adopted by the supreme governing body of the United Nations Framework Convention on Climate Change, the Conference of Parties

(Dimitrov, 2010, 21). Instead, the Conference Parties simply “takes note of the Copenhagen Accord” (Conference of the Parties, 2009). Hence, the Copenhagen Accord is a purely political agreement and does not have any international legally binding status.

#### V.3.6. Post-Copenhagen and the West blaming China

Immediately after the COP, some commentators in the Western media (Lynas, 2009) were critical of China’s obstructive role during the negotiations. The British secretary of state for energy and climate change, Ed Miliband, accused China of taking out all references to specific targets such as a 50% reduction in global emissions by 2050 or an 80% reduction by developed countries (Vidal, 2009e). As a result, the Copenhagen Accord does not mention a peak in emissions by 2020, which resulted in much weaker language and with the caveat that “the time frame for peaking will be longer in developing countries and bearing in mind that social and economic development and poverty eradication are the first and overriding priorities of developing countries [...]” (Conference of the Parties, 2009). In response to this criticism, the Chinese Mission to the EU (2009) issued a strongly worded press release, which accused some EU politicians of shirking “responsibilities that should be assumed toward developing countries, and to provoke discord among developing countries”. Despite this strong rebuke, China also expressed its appreciation for “the leading role already played by the EU on tackling climate change and the EU’s positive efforts” (Chinese mission to the EU, 2009).

Chinese leaders were dismayed that the post-Copenhagen analysis in Western media was overly focused on the issue of China’s need to submit ‘measurable, reportable and

verifiable commitments'. Chinese policy-makers stress that China's track record on improving its energy efficiency is excellent. For example, China quadrupled its Gross Domestic Product between 1980 and 2000, while only doubling its emissions. Its diplomats anticipated some goodwill for China's position in Copenhagen, given this past achievement in combination with the inclusion in China's 12<sup>th</sup> Five-Year-Plan to – again – almost halve the carbon intensity of its economy in the next 10 years. Once the discussions in Copenhagen started to focus on questions of MRV, China unsurprisingly compared its own "concrete deeds" (Zhenhua, 2010) to the inaction of industrialized states. In his speech to the plenary session of the COP15, Premier Wen Jiabao emphasized that greater attention should have been focused on the lack of compliance of industrialized states, because "[...] a review of implementation shows that the emissions from many developed countries have increased rather than decreased" in the first commitment period (Wen, 2009). Also in Copenhagen, Chinese negotiators did not differentiate between the track records of different Annex I countries: Some industrialized states (e.g. US, Canada and Australia) have allowed emission to go up well above 1990 levels, while the EU is likely to achieve its Kyoto targets. Premier Wen agreed that long-term – for example 2050 – targets are necessary, "but it is even more important to focus on achieving near-term and mid-term reduction targets, honoring the commitments already made and taking real action" (Wen, 2009). Moreover, the 2020 reduction targets recently announced by developed countries fall considerably short of the emission cuts required to meet the 2 degrees Celsius target.

Ultimately, the Copenhagen Accord moves somewhat in the direction of blurring the distinction between Annex I and developing countries. Commitments undertaken in developing countries – with the exception of Least Developed Countries and small island

states – will be listed in an ‘Appendix II’<sup>95</sup>. The final language of the Accord demonstrates that China did not yield much in the face of enormous international, in particular American, pressure on the issues of a legally binding commitment or MRV. A letter from the Director-General of the Climate Change Department within China’s National Development and Reform Commission, addressed to the UNFCCC secretariat, indicated China’s commitments to the Copenhagen Accord, but reiterated that this commitment is “autonomous” and “voluntary” (Su, 2010; China, 2010). Moreover, in line with Article 4, paragraph 7 of the UNFCCC, China qualifies its commitment in two ways. First of all, the extent to which China will effectively implement this commitment will depend on the effective implementation by Annex I Parties of their commitments under the Convention related to financial resources and transfer of technology. The issue of mitigation also remains a particularly sore point for China, which according to China’s lead negotiator Yu Qingtai (2009) requires some ‘deep soul searching’ by Annex I countries. Time and again, Chinese negotiators emphasized that the CBDR principle imposes an obligation on Annex I countries to make the deepest cuts first, but that this has not happened. This criticism is aimed in particular at the world’s long-time biggest emitter, the US, where domestic debates on climate change or low carbon energy have not advanced much over the last decade.<sup>96</sup> Secondly, the letter that signals China’s first and overriding priority is economic and social development and poverty eradication, i.e. not emissions reduction.

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<sup>95</sup> Appendix I lists the commitments of Annex I countries.

<sup>96</sup> It is no coincidence that the lack of progress in the context of the UNFCCC coincides with the lack of action in the US. The Marrakech Accords were approved just after the George W. Bush administration refused to ratify the Kyoto Protocol. Thanks to a diplomatic push by the EU to get Russia to ratify the Kyoto Protocol, the Protocol entered into force in 2005. While this constituted undoubtedly a legal milestone, no real breakthroughs have been achieved since then in subsequent Conferences of Parties.

Despite China's continued emphasis in Copenhagen on the responsibilities of industrialized countries, China does recognize the EU's leadership on climate change:

China is happy with EU's leadership on climate change, because the EU, compared with other developed countries, upholds the principle of CBDR and the Kyoto Protocol more actively to our knowledge. [...] Generally speaking, the EU will hopefully fulfil its targets under the first commitment period. In this respect, the EU side has done better than the biggest developed country [the US], which refused to join the Kyoto Protocol (Author's interview, Mission of the People's Republic of China to the EU official, January 13, 2010).

However, the EU's climate leadership has weakened in recent years:

[...] the EU has started to analyse and study other developed countries' situations and [economies] of so-called emerging countries. And it seems that they have become a little bit reluctant to move forward more ambitiously. That is a kind of setback. But compared to other developed countries, it is still in an advanced position (Author's interview, Mission of the People's Republic of China to the EU official, January 13, 2010).

A specific source of friction between the EU and China concerned the continuation of Kyoto Protocol after 2012. China's basic position before Copenhagen made it clear that the Kyoto Protocol is to remain valid "sine die" (NDRC-China, 2009). In contrast, the EU's objective in Copenhagen was to agree a single "legally binding agreement for the period starting 1 January 2013 that builds on the Kyoto Protocol and incorporates all its essentials" (Council of the EU, 2009). China perceived this EU position as cozying up to the more hardline US position. Undoubtedly, Copenhagen was a major test for the EU-China relationship.

The EU and China may have had some disagreements and not so friendly discussions during the [Copenhagen] negotiations. But in bilateral cooperation in the environmental area, China and the EU have cooperated pretty well. Apart from climate change, we also have projects on air and water pollution. Also on Carbon Capture and Storage in coal-fired power plants. We have very good technical cooperation in the environmental fields (Author's interview, Mission of the People's Republic of China to the EU official, January 13, 2010).

As this quote makes clear, the EU-China dialogue on climate change extends beyond encounters in the multilateral framework of the UNFCCC. There is a clear mutual

understanding that only increased cooperation on climate change can bring an adequate response to climate change closer.<sup>97</sup>

As understanding of the severity of the climate crisis has improved, there is a growing sense of frustration with China's discourse about the West's historical responsibility, CBDR and the need for industrialized states to 'go first'. The lack of progress over the last ten years on key issues like mitigation efforts in developing states has led some like Jonathan Pershing, President Obama's deputy envoy, to be sceptical about a continued central role for the UN and the UNFCCC. In his view, the requirement to decide everything by consensus and the involvement of all 192 states stalls meaningful progress. While not excluding the UN completely, focusing negotiation efforts among a group of leading economies (e.g. the US-sponsored Major Economies Forum or the G-20) could pay benefits, according to Pershing (Goldenberg & Vidal, 2010). This realisation has also begun to sink in among the traditionally UN-minded European policy-makers. Chief negotiator for the European Commission Arthur Runge-Metzger also expressed his frustration with the lack of progress: "If Cancun [COP16] does not produce a solid outcome that takes the fight against climate change forward, then I think it risks becoming irrelevant in the eyes of the world" (Watts, 2010).

#### **V.4. Conclusion**

The outcome of the 15<sup>th</sup> Conference of Parties in Copenhagen clearly demonstrated that the 'norm robustness' of a global mitigation norm remains weak. The specificity, durability and concordance of a global mitigation norm remains low, as there is little agreement about who should reduce emissions by how much and what the timeline for

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<sup>97</sup> More about bilateral EU-China cooperation on climate change in the Chapter VI.

these mitigation efforts is. The main obstacle for the emergence of a global mitigation norm is the lack of compromise about the exact interpretation of the CBDR principle with regard to climate change. Once again, Copenhagen demonstrated the divide between North and South on this issue and the EU was unable to play a role in bridging this divide. The CBDR leads China to emphasize the historical responsibility of the West and the 'polluter pays' principle. According to Chinese diplomats, this implies that – voluntary – mitigation actions by developing states depend on the effective implementation of the – legally binding – commitments of industrialized states. This principled stance of the G-77 plus China or the Global South runs counter to Northern demands for binding commitments for *all* states. Or in the words of the current US Secretary of State Hillary Clinton (2009): "Being good stewards [of this fragile planet] requires us to be pragmatic, not dogmatic".

The Copenhagen Accord was clearly not the result the EU had hoped for, but was Copenhagen yet another failure for the EU's foreign policy? The short answer is 'yes', but not for lack of trying. The EU – together with environmentalist NGOs – clearly won the struggle over expectations management ahead of the COP15, which led to high expectations for 'Hopenhagen', as a campaign of the International Advertising Association (2009) labelled the summit. The 2009 climate summit was one of the largest UN gatherings in history with 119 heads of state in attendance and 45,000 participants, which demonstrated that climate change is not 'just another' environmental issue, but should be a political priority everywhere. However, the EU became victim of its own efforts to increase expectations. The Copenhagen Accord does include a reference to the 2 degrees Celsius target, which is a long-standing EU position. The Accord's paragraph about the need for new climate adaptation finance for developing states also

reflects the EU's proposals. However, on a key issue like mitigation, the EU made no real progress.

To be fair to the EU, the weak outcome from Copenhagen is a result of the failed collective leadership of industrialized states. Over the last decade, there has been a complete absence of meaningful legislative progress to reduce emissions in the US, Canada, Japan and Australia. This inaction dealt a very bad hand to EU diplomats when engaging China and negotiating an ambitious outcome in Copenhagen. The conclusion of Depledge (2006, 19) that “the greatest single factor that would help revitalize the 15-year [now 20-year] old climate change negotiations would be tangible success on implementation” still stands.

Copenhagen was as much a failure for the US as it was for the EU, as the Obama administration also proved unable to move China in any meaningful way on one of its key issues, namely MRV or the need for measurable, reportable and verifiable commitments for developing states. The language on MRV in the Copenhagen Accord is copied almost word for word from the Beijing Declaration of the BASIC countries. The Copenhagen Accord respects all the ‘red lines’ in China’s position. Despite negative reports in the Western press about China’s intransigence, China’s leaders can consider Copenhagen as a success for its diplomacy, particularly its ability to keep the G-77 united and finding allies in the BASIC countries for its positions on climate change.

This conclusion of this chapter has painted a rather bleak picture of the prospects for the EU to play a leading role in key discussions within the multilateral framework of the UNFCCC. Two caveats must be added. First of all, “[the EU’s] industrial and technological leadership – leading the way to a low-carbon economy [...] – will be a

much sought after competence also in a post-Kyoto world”, even in the total absence of a global agreement that details specific emission reductions (Haug & Berkhout, 2010, 27). We should remember that the goal of a post-2012 Kyoto Protocol, much like its predecessor, is “to reorient the global energy market in order to meet the objective of stabilizing concentrations of greenhouse gasses in the atmosphere” (Werksman & Cameron, 2000, 249). The EU has made the mistake of confusing mitigation targets with climate solutions. The best foreign policy on climate change will likely be a domestic policy that successfully reduces emissions. As a self-proclaimed climate leader, the EU has its ‘homework’ cut out for itself, namely demonstrating that economic growth and global competitiveness in the 21<sup>st</sup> century no longer depend on ever rising emissions, but rather on improved energy efficiency, investments in renewable energy, improved fuel quality, smart grids<sup>98</sup>, functioning carbon markets and the like. Any negotiation on climate change is ultimately about how states generate, distribute and consume energy. By making the link with the big energy questions of our time, Dimitrov (2010, 23) offers a useful reminder that Copenhagen was one battle in a long war to conquer the world’s dependence of fossil fuels for its energy needs, which “constitutes a veritable energy revolution”. By studying the EU’s negotiation tactics in multilateral negotiations on climate change, we should not lose focus on the longer-term trend of moving towards a low-carbon economy and the pioneering role that the EU has played and will play in that context.

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<sup>98</sup> To be able to accommodate intermittent sources of energy such as renewable energy, a smart grid is an energy grid that has been upgraded with sensors throughout the grid, which allows for real-time two-way communication between utility companies and consumers. Such a smart grid can better accommodate more decentralised energy sources and also allows consumers to feed power into the grid from e.g. roof-top solar panels. Finally, the installation of ‘smart meters’ in the homes of consumers allows them to manage their energy demands by e.g. shifting the use of a dishwasher to off-peak hours, when electricity prices are lower, reducing the need to invest in new generating capacity to deal with peak demands.

Secondly, while the contrast between the huge mobilization of civil society in Copenhagen and the ‘fig leaf’ result of the Copenhagen Accord is stark, we should remember that the UNFCCC framework is only one of the many fora, where climate and low-carbon energy policies are discussed. Well before Copenhagen, Vogler (2003, 31) already noted that “[t]ackling climate change will involve ‘multilevel’ governance”. Echoing these comments, Dimitrov (2010, 18) recently emphasized that “[t]his contrast between a stagnant UN process and a vibrant multilevel policy realm underscores the need for the scholarly community to develop a composite measure of global climate governance”. A post-2012 Kyoto Protocol alone will not be enough to decisively tackle climate change. Discussions on how to reduce emissions are also taking place elsewhere: carbon markets, corporate gatherings such as the World Economic Forum in Davos, public-private partnerships such as the United Nations Global Compact initiative, and so on. In addition to engaging in these fora, the EU has also used the traditional diplomatic tool of bilateral summits to engage with China, Brazil, Japan, Canada and others on climate change. As the world’s current largest emitter of GHG emissions, China is one of the most important partners in fighting climate change. This is why the next chapter will focus on the bilateral diplomatic steps that the EU has undertaken to influence China’s climate and energy policies.

## **Chapter VI: The European Union as a bilateral ‘norm leader’ on climate change vis-à-vis China<sup>99</sup>**

“Diplomacy is letting someone else have your way”  
Former Canadian Prime Lester B. Minister Pearson<sup>100</sup>

### **VI.1. Introduction**

The EU claimed leadership of international discussions on climate change. It committed itself to relatively domestically ambitious mitigation targets. Yet, the EU also spent considerable diplomatic capital in convincing the world’s largest emitter of greenhouse gas emissions, the People’s Republic of China, to tackle climate change. The EU’s efforts in Copenhagen are widely perceived as yet another diplomatic failure of the EU’s multilateralist diplomacy (see previous chapter). Looking beyond the EU’s disappointment in Copenhagen, this chapter explores the EU’s self-proclaimed *bilateral* leadership on climate change vis-à-vis China. An exclusive focus on the interactions between the EU and the world at the multilateral level does not tell the whole story of the EU’s foreign policy on climate change. The EU’s climate diplomacy is played out in a multilevel governance setting (Vogler, 2003; Dimitrov, 2010). This is why the EU has emphasized the urgency of climate change in many of its bilateral contacts, in particular in its interactions with China as the world’s current largest emitter of CO<sub>2</sub>. An ‘EU-China Partnership on Climate Change’ was established in 2005, well before any talk of Copenhagen, aimed at strengthening cooperation and dialogue on climate change and energy between the EU and China (European Commission, 2005a).

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<sup>99</sup> A version of this chapter has been published in the January 2011 issue of *European Foreign Affairs Review* (De Cock, 2011).

<sup>100</sup> Quoted in Freeman (1994).

The 15<sup>th</sup> Conference of Parties and the Copenhagen Accord did not match the EU's ambitions. While China remained steadfast in Copenhagen in refusing to commit to legally binding emission limitation commitments, China has become increasingly interested in implementing climate-friendly policies domestically, in the absence of any legally binding commitment to do so in the context of the UNFCCC. China's reluctance to take on binding mitigation targets in Copenhagen could be explained by the important role for coal, the most carbon intensive fossil fuel, in China's energy mix and China's need to safeguard its rapid economic rise from environmental restraints. This fits well with the explanations provided by rationalist approaches such as liberal institutionalist approaches, which have traditionally analyzed international politics as a two-level game between competing domestic interests to influence the state's interests, succeeded by the international negotiation between states (Putnam, 1988; Moravcsik, 1998).

Yet, despite China's reluctance to commit to legally binding targets, the highest political leadership in China has committed to a range of actions. For example, the year 2007 saw China launch its National Climate Change Programme. The 11<sup>th</sup> Five Year Plan commits China to the goal of achieving 20% energy intensity reduction in the period 2006-2010 and it is well on track to achieving this objective (Levine *et alia*, 2010). This goal will likely be strengthened in the 12<sup>th</sup> Five Year Plan, which will commit the Chinese economy to a 40-45% carbon intensity reduction by 2020. Leading up to the Copenhagen conference, a number of good news stories about China's green investments surfaced in the media, focusing on the green elements in its stimulus package (Euractiv, 2009a), its investments in renewable energy (Buijs, 2009; Pew Center on Global Climate Change, 2007) and its efforts in the area of Carbon Capture and Storage (CCS) (Friedman, 2009). Since signing onto the Kyoto Protocol in 2002, China has been tackling the sharp increase in emissions. Its initiatives in this area

substantially multiplied after 2005. These developments represent a major policy change that rationalist approaches have trouble explaining and constitute the puzzle, which I want to explore in this chapter.

Specifically, this chapter probes the link between China's interest in reducing the carbon intensity of its economy<sup>101</sup> since 2005 and the simultaneous intensification of bilateral EU-China dialogue on environment and energy. This chapter asks whether and how the EU has directly influenced China through its bilateral diplomacy to tackle climate change and develop more ambitious mitigation policies. Constructivism has been criticized for its focus on international level norms to the neglect of domestic political structures as important variables to explain variation in norm diffusion. These critiques provide the theoretical framework for this chapter. I argue that the EU has contributed to a learning process among Chinese policy-makers about how greater mitigation efforts can be compatible with economic growth and improved energy security: The EU was able to successfully frame emission reduction strategies in China as contributing to China's economic progress and energy security. This argument will be explored in four areas: The growing recognition in China of the economic impacts of climate change, the new recognition in China of the potential of the green economy, the appreciation for the future role of CCS in China and the awareness of the potential of renewable energy sources for China. In addition, the role of EU investments in Clean Development Mechanism projects in China in building a domestic constituency in China interested in low-carbon development is addressed.

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<sup>101</sup> Relative emissions or emission intensity is defined as the emissions per unit of output. Output could be e.g. units of production or Gross Domestic Product. Absolute emissions refer to the total amounts of CO<sub>2</sub> emissions.

## VI.2. Theoretical framework

Checkel (2006, 362) summarizes an oft-repeated critique of Constructivist research in the International Relations discipline:

This argument is too structural. It's under-determined and based on unrealistic assumptions. Moreover, it tells us little about how the world really works.

While this is a critique that has often been levelled at Realist International Relations scholars and their focus on the structural effects of the anarchic world system, Constructivists have not avoided this trap either. Legro (1997, 31-32) was right in pointing out that early Constructivists were overly focused on theoretically demonstrating that 'norms matter' in international politics (Onuf, 1989; Kratochwil, 1989). This resulted in a selection bias in favour of successful examples of norm diffusion, which led to "an overly sanguine view of the ability of new ideas to alter International Relations in a positive direction" (Bernstein, 2001, 216). This was understandable in light of an International Relations discipline, dominated by Realism and rationalist International Political Economy approaches (Finnemore & Sikkink, 2001, 397) For Legro (1997, 31-32), the Constructivist research agenda should develop a better understanding of "which norms matter, the ways they matter, and how they matter relative to other factors".

Constructivist scholars have taken up this challenge by focusing more on how variation across domestic structures can explain the different domestic impacts of international-level norms. For the purpose of this chapter, I use the concepts of social fitness of new norms with existing norms. Bernstein (2001, 20 and 222) emphasizes "the *social* fitness of proposals for new norms with extant social structure [which] explains why some norms are selected, while others fall by the wayside [emphasis in original]". Three factors determine whether a norm becomes institutionalized and assumes a 'taken for granted status': "*the perceived legitimacy of the source of new ideas, fitness with extant*

*international social structure; and fitness with key actors' identities at various levels of social structure* [emphasis in original]" (Bernstein, 2001, 184). In other words, for new ideas to be picked up, Bernstein argues that both non-governmental norm entrepreneurs and governmental norm leaders must ensure that their specific norms 'fit' with "extant international social structure" (Bernstein, 2001, 21). This is also true for the transfer of an international norm to a domestic arena. Foreign norm entrepreneurs or norm leaders can increase their chances of influencing the domestic political debate in another country by ensuring that their ideas fit within the domestic political discourse.

One of the ways to achieve this goal is to start 'framing' a norm in a particular way, because "the meanings of any particular norm and the linkages between existing norms and emergent norms are often not obvious and must be actively constructed by proponents of new norms" (Finnemore & Sikkink, 1998, 908). By framing issues, norm entrepreneurs or norm leaders can offer new information, which can lead actors to reconsider their interests (Nagtzaam, 2009, 76). Payne (2001, 39) suggests the following definition of framing:

For the purpose of norm-building, frames provide a singular interpretation of a particular situation and then indicate appropriate behaviour for that context.

By using specific frames, norm entrepreneurs or norm leaders can overcome ideational obstacles in highly contested normative struggles, because a frame operates as a persuasive device that can "alert others that their interests and possibly their identities are at stake, and propose solutions to ongoing problems" (Barnett, 1999, 25).

In addition, research by Checkel (1999, 85) underlines the importance of domestic structures to explain norm diffusion. Depending on the structure of domestic institutions, bottom-up or top-down mechanisms will gain or lose importance. In liberal state

structures, the actions of non-state actors and policy networks are key mechanisms for norm diffusion, whereas in non-liberal or 'state-above-society' structures, other mechanisms such as 'social learning' are more influential. Checkel (1999, 89) identifies this diffusion mechanism as particularly relevant in countries like China that do not have a liberal state structure, which he labels as 'state-above-society':

The state sits apart from and exercises considerable control over society. In this top-down policymaking environment, elite learning is necessary if international norms are to be empowered domestically, as learning theory suggests, it is also more likely in this less politicized setting. For Checkel (1999, 88), "social learning, not political pressure, leads agents – typically elite decision-makers – to adopt prescriptions embodied in international norms".

Lanteigne (2009, 19-24) stresses that Chinese foreign policy-making is no longer as centralised as it was under Mao and that, in fact, a range of ministerial and bureaucratic actors contribute to the decision-making process. Nonetheless, "much of the overall decision-making power over both domestic and foreign affairs rests with the [Chinese Communist Party] Politburo Standing Committee [...]. Many analysts seeking to gauge foreign and domestic policy directions often examine the composition of the Standing Committee as it changes every five years" (Lanteigne, 2009, 22-23).<sup>102</sup> The National Development and Reform Commission (NDRC) is the main body in charge of economic and energy policy and has, as a result, become the main driver of policy on climate change. Already in 1990, a National Climate Change Coordination Leading Group was established, and in 1998 was supplemented by a Climate Change office, which functions as the secretariat to the coordination group. It is generally accepted that "environmental

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<sup>102</sup> The Politburo is composed of the President, the vice-President, the Premier, the Vice-Premier, the head of the National People's Congress, the head of the Chinese People's Political Consultative Committee and other senior officials. Current members of the Politburo are part of the fourth generation of Chinese leaders, which moved through the ranks during Deng's 'open door' economic policy and as a result are less attached to the Maoist views, which constrained China's active stance in international politics (Lanteigne, 2009, 23).

policy-making in China has been almost exclusively a top-down process” (Harris, 2005b, 133). More recently (in 2003), China’s leadership “attempted to centralize control over the sector and create an institutional framework that will enable formulating and implementing a more overarching energy policy” by creating a National Energy Bureau under the National Development and Reform Commission (Meidan *et alia*, 2009, 595). In 2010, the creation of a National Energy Commission caused a bureaucratic shuffle, which could result in a further centralization of policy-making on energy-related matters in China (Wong, 2010b).

As with other issues in China, the foreign policy situation is changing quickly, but – compared to the process of making foreign policy in democratic structures at EU-level or in the US – China can be safely categorised as a ‘state-above-society’. Hence, we need to look for evidence of social learning among Chinese foreign policy-makers, inspired by foreign policy efforts of the EU to persuade them to take responsibility for reducing China’s GHG emissions. Reviewing the role of NGOs in China’s socialisation process on climate change, Schroeder (2009a) suggests that both Chinese and international NGOs, concerned about China’s rising share of global GHG emissions, have shied away from the naming-and-shaming tactics of human rights NGOs. Rather than pointing the finger at China for its increasing emissions, NGOs chose to take a constructive role, “in which they only voice criticism if they can also provide solutions and [...] give positive incentives for behavioural change” (Schroeder, 2009a, 67-68). An epistemic community like the Intergovernmental Panel on Climate Change and its reports have played a more crucial role than NGOs in the diffusion of knowledge on climate change in China (Economy, 1997, 23-27). Given the important role of climate scientists, Schroeder (2009a, 68-69) emphasizes ‘complex learning’ in the socialisation process of Chinese leaders on climate change as a factor that pushed the growing recognition of the

challenge of climate change in China, “in which the target state [China] is convinced and not forced into the internalisation of the norm”.

So, how do the ‘frames’ used in the EU’s climate diplomacy vis-à-vis China bring about such elite learning on climate change and low-carbon economic development among Chinese leaders? Providing the right arguments and knowledge to make it understood that reducing CO<sub>2</sub> emissions is in China’s interest becomes crucial to convince the Chinese political leadership to deal with climate change.

Before addressing the specific frames used by the EU in this diplomatic exercise, I give a brief overview of the EU-China relations dialogue on climate change and energy. The establishment of the ‘EU-China Partnership on Climate Change’ in 2005 aimed to strengthen cooperation and dialogue on climate change and energy between the EU and China. Even though strengthening “the momentum for discussions of a multilateral climate change regime ‘post 2012’” is part of this high-level political framework, the Partnership’s supporting documents express a clear preference for “concrete action”, to help China deal with its climate and energy challenges (European Commission, 2005a). The EU has contributed to the development of policies in China that promote low-carbon energy in a number of ways.

### **VI.3. Raising awareness about the economic costs of climate change**

Climate change has been termed a “super wicked problem” for public policy, which “defies resolution because of the enormous interdependencies, uncertainties, circularities, and conflicting stakeholders implicated by any effort to develop a solution” (Lazarus, 2009, 1159). The uncertainty surrounding the timing, scale and location of the

future impacts of climate change inhibits policy-makers everywhere from implementing costly mitigation policies today. This is not different in China. While single extreme weather events cannot be attributed to climate change, a string of recent weather-related disasters has heightened the understanding that the costs of adapting to climate change for China will be enormous. In August 2010, the death toll of massive mudslides in northwest China's Gansu Province had risen to about 1500. In the same year, a record-long drought hit the southwest Yunnan and Guizhou provinces, leading to major crop failures and drinking water shortages, followed by flash floods (People's Daily, 2010a; 2010b; 2010c; 2010d; 2010e; 2010f). Due to record droughts, the United Nations Food Agricultural Organisation warned that China's self-sufficiency in grain was under threat and China would require important grain imports (Bradsher, 2011).

It is little known that the EU invested in modelling work on the impacts of climate change in China. The UK government has been particularly active in this respect. European diplomatic efforts have sought to amplify the messages for China in the Review by Lord Stern (2007, i-ii), entitled 'The economics of climate change'. The key message from the Stern Review is that "[t]he benefits of strong early action on climate change outweigh the costs", which frame mitigation efforts no longer as a potential loss for the economy, but rather "as an investment, a cost incurred now and the coming few decades to avoid the risks of very severe consequences in the future". In other words, "ignoring climate change will eventually damage economic growth", while early investments in mitigation are less costly (Stern, 2007. xvii). Given the preoccupation of Chinese policy-makers with economic development to help alleviate poverty in China, this frame – focusing on the economics of climate change – is likely to find a 'social fitness' among China's political elite. With EU support, the Hadley Centre in the United Kingdom trained Chinese meteorologists in using its PRECIS climate modelling software to analyze the

implications of climate change in all of China's regions (Author's interview, European Commission DG Environment official, January 8, 2010). This enabled Chinese climate scientists to demonstrate to their own leaders that climate change will have a major impact. For instance, Yiniong *et alia* (2009) use the PRECIS model to simulate future impacts of climate change in China. Such modelling by climate scientists show that temperature increases from climate change will increase the incidence of malaria (van Lieshout *et alia*, 2004). For example, "a 1 [degree Celsius] rise in minimum temperature may result in approximately 11.8% to 15.8% increase in the number of malaria cases" in the temperate regions of China (Zhang *et alia*, 2010, 439). Furthermore, the extreme weather events that result from climate change will pose a grave challenge to China's food supply (with rain-fed crop yields such as wheat and rice decreasing by 12-20% and 8-14% by 2050) and come at a considerable economic cost, estimated to be about 2% of China's Gross Domestic Product (Erda & Zou, 2006, 2 and 11). A recently published report *The Power of Advice: Experts in Chinese Climate Change Politics* (Wuebbeke, 2010, 35) concludes that such experts have "a considerable impact on China's climate change policy", highlighting the key role played by semi-governmental research institutes "dealing with climate change mitigation and the economic and political implications of climate change".

According to Umbach (2010, 44), "[t]he Chinese government is starting to realize that climate change can heavily affect China's future economic development and sociopolitical stability [...]" and that "[c]limate change is no longer a rich man's problem". Its 2007 National Climate Change Programme dedicates a complete section to the impacts of climate change on China, including possible increased instability in agricultural production, increased frequency and intensity of forest fires and insect and disease outbreaks (NDRC-China, 2007, 16-19). A joint 2006 report from China's

National Bureau of Statistics and its State Environmental Protection Administration demonstrated this new understanding by pointing out that the economic losses caused by environmental pollution in China in 2004 amounted to 3.05% of China's Gross Domestic Product for that year (Curnow, 2009, 128). This shows that environmental issues and climate change and their negative economic impacts in particular, have gained traction on China's political agenda.

The EU may have been the main actor – apart from the Intergovernmental Panel on Climate Change – to raise awareness about the impacts of climate change in China, but other actors helped to amplify the message about the hidden economic costs of the lack of environmental policy. A World Bank (1997) report demonstrated that China's rapid economic growth was the leading cause for environmental degradation in terms of high levels of water and air pollution. This report estimated that “the cost of environmental destruction ranged from 8% to 13% of China's total [Gross Domestic Product]” (Heggelund, 2007, 418). A study of the Organisation for Economic Cooperation and Development (2007, 238-239) estimated that the health damage from air pollution alone ranged around 1.8% of China's Gross Domestic Product. This study forecasted the future costs in a business-as-usual scenario by 2020:

600,000 premature deaths in urban areas, 9 million person-years of work lost due to pollution-related illness, 20 million cases of respiratory illness per year, 5.5 million cases of chronic bronchitis and health damage: an overall cost of health damage reaching 13% of [Gross Domestic Product]. Chinese policy-makers were not very familiar with concepts like negative externalities of economic activities. Demonstrating how burning coal on a massive scale not only generates economic benefits, but also carries economic costs, has helped their understanding that pursuing environmental policies do not necessarily contradict China's economic growth imperatives (see also Ho & Nielsen, 2006). The Organisation for Economic Cooperation and Development's and the World Bank's focus on the cost of air

pollution is highly relevant, because it contributes to the debate about the total real costs of China's heavy reliance on coal.<sup>103</sup>

#### **VI.4. Promoting 'green growth' in China**

Chinese views on environmental protection did change compared to early negotiations on climate change. Economy (1997) outlines the principles that guided Chinese policy in preparation of the 1992 UNFCCC. One of them addressed how to balance the environment and the economy:

Environment and development should be integrated but environmental protection should not be achieved at the expense of the economy. Environmental protection can only be successful when development has been attained (Economy, 1997, 32).

Whereas environmental issues like climate change took a backseat to rapid economic development until recently, the Chinese leadership has relaxed its singular emphasis on economic development and adopted a discourse around “comprehensive, balanced and sustainable development, which puts people's interests first” in the words of Hu Jintao (2009).

The Stern Review (2007, xi) also emphasized that tackling climate change is not the enemy of China's economic growth and highlighted the economic potential of a low-carbon economy: With strong, deliberate policy choices, The Stern Review demonstrated that countries that transition to a low-carbon economy will incur a cost of around 1% of Gross Domestic Product, which is “small relative to the costs and risks of climate change” (Stern, 2007, xvi). However, this is not the end of the story: “Markets for low-energy products are likely to be worth at least US \$500 billion per year by 2050, and

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<sup>103</sup> China's heavy reliance on coal that is high in sulphur is “responsible for 75% of SO<sub>2</sub> emissions, 70% of smoke and smog and 85% of all CO<sub>2</sub> emissions” (Umbach, 2010, 42).

perhaps more. Individual companies and countries should position themselves to take advantage of these opportunities”. Other more indirect economic benefits of introducing mitigation policies are less public expenditure on energy subsidies, reduced ill-health and mortality rates and improved energy security.

An indicator of China’s growing belief that economic growth and environmental protection, and emissions reduction in particular, can be combined, is its 2008 stimulus package. China’s stimulus amounted to about EURO 400 billion, of which Chinese officials claim that “15% was invested in addressing climate change” (Luo, 2009). According to a HSBC report (2009, 3), “[a]lmost 40% of this is allocated to “green” themes, most notably rail, grids and water infrastructure, along with dedicated spending on environmental improvement”. Figures about the green elements of the Chinese stimulus may vary widely, but the ‘green economy’ argument has undeniably taken root.

In this respect, the 2009 EU-China Business Summit’s central theme of “The Green Agenda: Sustaining growth beyond the recovery” is telling. Speeches from the top of China’s political leadership show that the ‘development first, environmental protection later’ view of things has changed. Premier Wen Jiabao encouraged Chinese and European business to “make full use of the trade and investment opportunities that come along in the course of tackling climate change” (Wen, 2009b). Premier Wen Jiabao repeated China’s support for concluding a Comprehensive Strategic Partnership with the EU, which “should be anchored on a foundation of economic cooperation, be high-tech driven, and take the green economy as a priority” (Wen, 2009b). Premier Wen Jiabao stated clearly that China is ready to learn from the EU: First of all, Premier Wen is keen to benefit from the know-how of companies in the EU, which are “at the cutting edge of energy-efficient and environment-friendly technologies and managerial expertise” (Wen,

2009b). Secondly, Premier Wen expressed interest in the EU's regulatory expertise with its "effective policies to ensure energy efficiency and environmental protection in industry, transport, construction and other areas".<sup>104</sup>

These positive signals should not lead anyone to think that the Chinese leadership has committed to prioritise environmental over economic concerns overnight. China will continue to keep mitigation policies on the list of priorities as long as "measures for climate protection have positive effects on economic development, or at least pose no regret options": Otherwise, "enthusiasm for climate protection is severely restricted" (Schroeder, 2009a, 69). This points to a continued 'hierarchy of norms': Chinese policy-makers can only introduce climate friendly policies on a domestic level, if they do not interfere with the dominant norm of promoting economic growth. Underlying this stance is the belief that only China's economic growth of the last decades must be maintained to achieve social stability and alleviate the growing gap between the (urban) rich and (rural) poor (Heggelund, 2007, 158; Economy, 2006). Nonetheless, environmental protection is no longer seen as a rich country's priority among Chinese policy-makers: Since the turn of the century, there has been a gradual recognition in China of the *economic* costs of environmental pollution and an improved understanding that some environmental policies – such as reducing carbon emissions – can pay economic dividends. This is why a better understanding of the Chinese policies on how to 'fuel' this economic growth is essential to understand the change of tone in China's climate policies.

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<sup>104</sup> An example is the EU-China Automobile Exhaust Pollution Control Project, which dates back to before 2003 (Wallstroem & Zhenhua, 2003, 829). This project led to the implementation of more stringent emission standards for new vehicles. Generally, China has issued emission standards for new vehicles and engines based on the EU Standards, Euro I through Euro IV (Hao et alia, 2007, 135).

## **VI.5. China's energy mix in the context of climate change**

China's energy use is unsustainable. There has been an enormous expansion in China's power sector, "whose generation capacity increased two and a half fold from 319 GW in 2000 to 793 GW in 2008" (Wang & Watson, 2009, 12). Of particular concern is the enormous increase in coal-fired power plants, because "every week to 10 days, another coal-fired power plant opens somewhere in China" (Bradsher & Barboza, 2006). Demand for coal in China has consistently exceeded expectations about future coal consumption: The annual growth rate of coal consumption averaged above 10% over the last decade, from 1000 to about 3000 million tonnes of coal (Aden *et alia*, 2009, 16).<sup>105</sup> China's oil consumption is similarly unsustainable and almost doubled in the period 1999-2009; rising from 4363.6 to 8200 thousands of barrels per day (Energy Information Administration, 2010). Around 2005, these trends in China's energy consumption were projected to continue, rather than level off. Domestic production of coal cannot keep up with current demand (Aden *et alia*, 2009, 39) and China is currently importing more than half of the oil it needs. The International Energy Agency estimates that China's net imports may account for 84% of China's oil consumption by 2030 (Umbach, 2010, 35). These facts are well known and have given rise to concerns in China about its energy security.

While China has been able to reduce the energy intensity of its Gross Domestic Product by almost 5% per year in the period from 1980 until 2002, this trend was reversed from 2002 onwards: "[The energy intensity of China's economy] started to increase by 3.8%

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<sup>105</sup> As a result, Chinese emissions doubled between 1996 and 2006 (Energy Information Administration, 2008).

per year on average in the period 2002-2005” (Tsang & Kolk, 2010, 188).<sup>106</sup> Chinese policy makers started addressing China’s growing appetite for fossil fuels, when they noticed the sharp increase in the carbon intensity of the Chinese economy between 2003 and 2004, a more than 10% increase in one year (Energy Information Administration, 2010) after a non-stop decline of the carbon intensity of China’s economy since 1980! This led to major concerns about China’s future economic development and its need for a secure supply of energy. To respond to this multitude of challenges, China’s State Council (2007) set out a number of strategic goals in its White Paper on Energy:

The basic themes of China's energy strategy are giving priority to thrift, relying on domestic resources, encouraging diverse patterns of development, relying on science and technology, protecting the environment, and increasing international cooperation for mutual benefit. It strives to build a stable, economical, clean and safe energy supply system, so as to support the sustained economic and social development with sustained energy development.

China has been particularly active on three fronts. Firstly, China has the supply side of its energy mix addressed by reducing the importance of fossil fuels, upgrading the role of clean energy and cleaning up emissions from ‘dirty’ coal. Secondly, and given the current low levels of energy efficiency in China, the Chinese economy offers many opportunities to reduce its carbon intensity and, as a result, slow increases in demand for energy and as a result limit future increases in emissions: The Chinese government has pursued this goal through different means including “aggressively phasing out the least efficient coal-fired plants” (Greenpeace China, 2009, 5), a combination of raised electricity prices and tariffs, and reduced subsidies for energy-intensive industries and

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<sup>106</sup> Two major changes in China’s industrial sector explain this rising trend: First of all, carbon-intensive sectors such as the heavy-chemical and construction industries have expanded in China over the last ten years. Secondly, the large-scale move from rural to urban areas in China has driven more carbon-intensive consumption patterns for housing and cars (RCSD/CASS, 2006, 24; Freemant & Holslag, 2009, 11).

other policies related to energy efficiency (Tsang & Kolk, 2010, 188 and 192). Through a set of energy efficiency initiatives, such as the Ten Key Projects and the Top-1000 Program, Levine *et alia* (2010, 3) emphasize:

China has made substantial progress toward its goal of achieving 20% energy intensity reduction from 2006 to 2010 and that many of the energy-efficiency programs implemented during the 11th FYP in support of China's 20% energy/[Gross Domestic Product] reduction goal appear to be on track to meet – or in some cases even exceed – their energy-saving targets.

These major efforts have already resulted in a reduction of the carbon intensity of the Chinese economy that is more in line with historical trends.<sup>107</sup> Thirdly, increases in Chinese emissions can also be limited by moving away from being the manufacturing base for the world. Moving the Chinese economy up the value chain will require changing the quality of economic growth. Only the issue of China's energy supply will be discussed in this chapter.

Elisabeth Economy (2007, 57) put it succinctly: "China's needs are vast, but its capacity poor". For example, China has tried to meet increased demand for transport fuel by importing more oil and gas as a supplement to coal. Before 1993, China was self-sufficient when it came to oil, but, as economic growth accelerated, the share of imported oil quickly grew and China's oil import volume exceeded its domestic output for the first time in 2008 (Amineh & Guang, 2010, 19). However, relying on such fossil fuel imports to meet increased energy consumption leaves China's economic development quite vulnerable to fluctuations in fossil fuel prices. For example, crude oil prices hovered between US \$90 to US \$140 per barrel in 2007 and 2008 (Energy Information Administration, 2011). The direct cost of a US \$10 increase in oil prices for China was

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<sup>107</sup> The combination of high rates of economic growth, concerns about China's energy security and the high carbon intensity of the Chinese economy leads Chinese politicians emphasize energy efficiency, given that major progress in this area is possible: "Institutionally, Chinese leaders essentially equate climate change with energy conservation" (Tsang & Kolk, 2010, 192).

“estimated at 13.6 billion dollars in 2004 [...], equal to 0.9% of [Gross Domestic Product] in 2003”, compared to 0.5% and 0.3% in the Eurozone and the US respectively (RCSD/CASS, 2006, 29). This demonstrates that ever-increasing oil and gas imports needed to power China’s high energy-intensive economy represents a considerable risk for China’s economic development. Moreover, the fact that China’s oil supply mainly originates from the Middle East and Africa heightens China’s concerns about energy security. Concern about the marine security of shipping large volumes of oil by sea and the inability of China’s navy to protect shipping routes make an increased reliance on the international oil market less attractive for meeting China’s energy security (RCSD/CASS, 2006, 46).

According to He and Qin (2006, 98), “the energy sector now becomes a bottleneck for China’s economic growth and the energy strategy”. Given the need to reduce oil and gas imports, the pursuit of a secure supply of energy for China can only be combined with tackling climate change in two ways. One is a continued reliance on China’s vast reserves of coal – be it a cleaner, low-carbon version – to meet increased energy demand by implementing Carbon Capture and Storage on a vast scale. And the massive deployment of renewable energy sources in China.<sup>108</sup>

#### VI.5.1. Cleaning up China’s reliance on dirty coal through Carbon Capture and Storage

In view of the climate imperative, the main problem of China’s increased energy use is that coal combustion accounts for about 80% of China’s power production as well as

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<sup>108</sup> The Chinese government wishes to quadruple its nuclear energy capacity by 2020. However, it is unlikely that nuclear will ever represent a share larger than 5% of China’s energy mix, due to a potential shortage of experience, the resultant concerns about quality and safety and a weak supply chain, which could create industrial bottlenecks to produce reactor-quality steel, concrete, and other vital components (WRI/ChinaFAQs, 2009; Ferguson & Squassoni, 2007). This is why I do not further discuss the role of nuclear energy.

82% of China's CO<sub>2</sub> emissions (Steinfeld *et alia*, 2008, 2). These figures lead these authors to following observation: "In no domain are China's energy-related decisions more crucial and the linkages to the global environment more direct than in electric power" (Steinfeld, 2008, 2). Of particular concern for climate change is that more 'dirty coal' is used to meet growing demand (Cheng, 2008, 298). Even though coal is the only fossil fuel that is available on a large scale within China, such rapid increases are unsustainable. If China would fuel its economic growth in the next decade by continued reliance on coal, i.e. a business-as-usual scenario, its population will be literally "choking on growth" (Kahn & Yardley, 2007).<sup>109</sup>

However, the environmental cost of coal is not limited to air pollution alone, as noted earlier in Organisation for Economic Cooperation and Development and World Bank studies. Cleaning up China's 'dirty' coal is also crucial to tackling climate change. Given the risks of an increased reliance on oil and gas imports, the report *2020 Scenario for Sustainable Energy in China* of the NDRC's Energy Research Institute forecasts that China's coal consumption will not drop dramatically by 2020. The report estimates a drop of coal's share in China's total energy production from 69.9% in 1998 to 64.8% in 2020 (Li, 2008, 28; Amineh & Guang, 2010, 26). Until renewable energy sources become more commercially viable (that is, cheaper than conventional fossil fuels), all analyses (Steinfeld *et alia* 2008; Aden *et alia*, 2009; Liu & Gallagher, 2010; Umbach, 2010, 38) agree that coal will remain central to China's energy supply. Hence, if the EU

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<sup>109</sup> There is a widespread perception – particularly in the US – about China's coal-based energy mix that "China builds crap, it burns crap, and it doesn't give a crap". A recent report from MIT researchers (Steinfeld *et alia*, 5-9) challenges this conventional wisdom and paints a picture of a state of flux for China's energy mix and the role of coal-fired power plants with "large units [with capacity of 300 MW and over, accounting] for the bulk of the new generating capacity", "significant uptake of advanced combustion and turbine technologies", greater occurrence of environmental technologies for handling sulphur oxide emissions and "a substantial portion – and possibly the bulk – of all coal consumed by Chinese power plants [...] now sourced on open-markets at market-determined prices".

wants China to curb its emissions, it becomes of utmost importance to develop a bridging technology that can reduce the carbon emissions related to using coal as a fossil fuel.

China increased its investment in Research and Development in the energy sector *fifty-fold* between 1991 and 2005 (Osno, 2009). This led to a number of innovative industrial applications in China's new coal-fired power stations, such as the use of coal gasifiers (e.g. the GreenGen project in Tianjin), supercritical and superultracritical boilers, which improve their energy efficiency.<sup>110</sup> There is widespread agreement that promoting greater efficiency in the industrial design of coal-fired power plants gives the biggest 'bang for the buck'. However, greater energy efficiency only slows the growth in China's emissions. To actually have emissions peak as soon as possible, the technique of CCS is widely promoted as the best way to decouple the ever-increasing coal consumption from CO<sub>2</sub> emissions.<sup>111</sup> According to the International Energy Agency (2011), using 'clean coal' by implementing CCS is quintessential to "to deliver almost 20% of the total greenhouse gas (GHG) emissions reductions we need to achieve in 2050 if we are to cost-effectively stabilise GHG concentrations in the atmosphere at an acceptable level". This is also true in China. To avoid more than 2 degrees of global warming, Wang and Watson (2008, 4) emphasize that Chinese emissions need to peak before 2030 and CCS can contribute to this goal.

The American environmental NGO National Resources Defence Council (2009, 2)

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<sup>110</sup> By burning coal at increasingly higher temperatures and pressures, such boilers can achieve major efficiencies, up to 40-50%.

<sup>111</sup> CCS is defined as "a technique for trapping carbon dioxide as it is emitted from large point sources, compressing it, and transporting it to a suitable storage site where it is injected into the ground. It has significant potential as a mitigation technique for climate change, both within Europe and internationally, particularly in those countries with large reserves of fossil fuels and a fast-increasing energy demand" (European Commission DG Climate Action).

pointed out that “[a]ll three components of CCS technology – capture, transport and sequestration – are commercially mature, but very few integrated large-scale projects are in operation today”. For CCS to dent current emission trends, “integrated commercial projects are urgently needs to gain operational experience and drive down costs”.<sup>112</sup> In order to avoid a situation where China’s newly built energy infrastructure ‘locks in’ high emissions growth for decades to come, action on Research and Development and making sure that newly built plants are “capture (and storage) ready” for future retrofit with CCS is needed today “to enable the vision of a low-carbon economy” (Liu & Gallagher, 2010, 73). This is the gap that the EU has sought to fill by focusing on CCS in its bilateral climate dialogue with China. The European Commission (2009b, 2) has also acknowledged this reality:

While energy efficiency is expected to deliver the greatest emissions reductions, for reasons of security of supply and economy, coal will continue to drive development, especially in emerging economies with substantial domestic reserves, such as China. It is therefore necessary to make the inevitable combustion of coal more climate-compatible.

In 2005, when the China-EU Partnership on climate change was launched, there was little or no interest in CCS technologies in China, even though China is well positioned to use CCS due to lower fuel, labour and material costs as well as its geology and “the location of large CO<sub>2</sub> point sources relative to potential geological sinks” (NDRC, 2009, 2). The Stern Review (Stern, 2007, 593-594) was one of the first publications to highlight the relevance of CCS for China and the EU was the first “to launch cooperative studies

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<sup>112</sup> Implementing CCS in China is not a straightforward case of technology transfer, which is usually understood in the climate change context as the transfer of *existing* know-how, experience and equipment for mitigating and adapting to climate change. Today, large-scale CCS does not exist *anywhere*. As part of its economic stimulus, the EU spent more than 1 billion EURO on six demonstration CCS projects. However, despite this investment, the high costs of the fledgling technology have hindered the development of carbon capture on a large scale. Large energy companies such as E.ON, Fortum and Shell have recently shelved plans for CCS projects, “putting at risk an EU target to have up to 12 large-scale projects online by 2015” (Garside, 2010a). These setbacks again demonstrate the major technological and financial challenges related to scaling up CCS.

with China on CCS” (Friedman, 2009). As part of this Partnership, a first China-EU Action Plan on Clean Coal was launched in 2005 to develop and demonstrate a near-zero emissions coal-fired power plant using CCS technology in China by 2020. The EU organised a number of international workshops on CCS for Chinese officials (Foreign Affairs Ministry PRC, 2006). The EU has funded a number of projects on CCS in China, such as CO<sub>2</sub>-Coach, which aims to “prepare the ground for developing large-scale facilities for zero emission electric power using coal as a feedstock” (CO<sub>2</sub>-Coach, 2009). European projects on CCS, such as EU-GeoCapacity (2009), intend to share European findings about the geological storage of CO<sub>2</sub> in the EU with Chinese scientists. Already in 2007, the Chinese National Climate Change Programme identified CCS as “advanced and suitable technologies” for “the clean and efficient utilisation of coal” (NDRC, 2007, 35). Five years after the launch of the EU-China Partnership, “China’s first near-zero emissions coal plant [the GreenGen project] won state approval [in June 2009]” (Friedman, 2009).

While this is undoubtedly a breakthrough, Morse *et alia* (2009, 7-13) point out that the main focus of the GreenGen project remains the development of the Integrated Gasification Combined Cycle or IGCC, which would lead to improved energy efficiency of China’s coal-fired power plants. Major improvements in the energy efficiency of its coal-fired power plants directly benefits China’s energy security. This is also why the Chinese government puts its own capital behind the IGCC part of the GreenGen project, while its CCS phase “remains somewhat of an afterthought” for which the Chinese government “is eager to spread its risks across international partnerships” (Morse *et alia*, 2009, 7-13). In his article in *The New Yorker*, Osnos (2009) also emphasized that the development of CCS technology in China requires outside investments to get such projects started: “Without sharing costs and technology, it is not at all clear, for instance,

that China will invest in the holy grail of climate science: funnelling greenhouse gases underground. [CCS] is so difficult and expensive that nobody has yet succeeded in using it on a large scale”.

In other words, “international finance will be crucial to the realization of CCS at scale” (Aden *et alia*, 2009, 4). The European Commission (2009b, 4-5) has not only accepted this reality, but also acted on it:

The development and deployment of CCS in developing and emerging economies, including China, can play a vital role in helping achieve global sustainable development but would be significantly delayed without assistance from developed countries. [In the absence of a price on CO<sub>2</sub> emissions in developing states,] CCS is not economically viable in the demonstration phase. EU public financing can help overcome some of the barriers outlined above and lever private financing, which would not otherwise be available for large scale CCS demonstration projects [emphasis in original].

In total, the EU and its Member States have already spent more than EURO 10 million to the Research and Development and demonstration of CCS technology in China (European Commission Delegation to China, 2009) and another EURO 100 million for the demonstration phase (European Commission (2009b, 11-12).

Apart from the EU’s role in providing financial assistance, the large-scale deployment of CCS also opens up a whole host of new regulatory questions. The UK-China Near-Zero Emissions Coal Initiative (2009, 1-2) points out that the demonstration and deployment of CCS in China will require regulations “particularly for the storage of CO<sub>2</sub> underground but also to address the safety of pipelines carrying CO<sub>2</sub> and the environmental impact of CCS plants”. In the longer term, regulations on long-term liability after the CO<sub>2</sub> has been stored underground will also be required. To give an opportunity to China to draw lessons from experiences with CCS elsewhere, the EU launched a project, called the Support to Regulatory Activities for Carbon Capture and Storage Project (STRACO<sub>2</sub>,

2010). STRACO2 was designed to support the development of a regulatory framework for CCS in the EU. However, several Chinese partners were also involved in the project to explore the applicability of this work in China. This project helped to identify the needs for CCS research and the CCS-related regulatory gaps regarding safety and liability in China.

Demonstrating to the Chinese leadership that CCS can deliver reduced CO<sub>2</sub> emissions will, however, only be part of the challenge for EU-funded projects on CCS in China. Any large-scale implementation of CCS in China will also have to be squared with other “fundamental and interrelated Chinese interests – in energy security, economic growth and development, and macroeconomic stability” (Morse *et alia*, 2009, 2). Whether this will be possible remains to be seen, as three major challenges remain for CCS projects to be economically viable. First of all, Morse *et alia* warn that (2009, 2) the ‘irony’ of CCS technology is that “it would almost assuredly result in significantly more coal use due to the parasitic load from CCS (typically estimated at 20-30%, although improved technology in the future could bring this number down)”. However, China’s coal supply chain is already overstretched<sup>113</sup> and finding 20% more coal will be a major challenge, even though China’s coal reserves are the third largest in the world. Secondly, Morse *et alia* (2009, 14) cite reports of the Intergovernmental Panel on Climate Change and the International Energy Agency (2011), which estimate that “adding CCS [will] increase the cost of generating coal-fired power by 40-80%”. This is especially problematic given the

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<sup>113</sup> In particular, there is a mismatch between the location of the China’s coal reserves, which are located in North-eastern China and the location of the energy consumption, which is located in South-eastern China. Shipping 20% extra coal to offset the energy losses related to CCS would require major investment in China’s overburdened transport infrastructure, adding additional costs to CCS technology (Morse *et alia*, 2009, 4; Aden *et alia*, 2009, 4). Umbach (2010, 38-39) warns that “it is sometimes more expensive to transport domestic coal than it is to import it from abroad”, which undercuts the oft-repeated argument that a continued reliance on coal in China guarantees its energy security: In 2007, China became a net importer of coal to meet demand in southern China coastal regions.

structure of China's energy market, where the central government "keeps tight control over electricity prices in China in order to meet its larger socio-political agenda" (Morse *et alia*, 2009, 15). In other words, unlike in the EU, utility companies cannot pass the increased prices for emissions onto the consumer. Thirdly, CCS is an energy technology that only deals with CO<sub>2</sub> and does not engender any co-benefits in terms of less acid rain, better air quality, improved energy efficiency and so on.

Given these major obstacles, "strong political will" from Beijing to deal with climate change will be required to make 'clean coal' in China feasible (Liu & Gallagher, 2010, 73). In the next few years, Chinese funding for the development of post-combustion technologies such as CCS will be a good litmus test to gauge how serious the Chinese government is about tackling climate change: Will Chinese decision-makers be willing to pay for CCS today – at considerable economic cost – to curb China's emissions in the long run? Some type of economic incentive (be it a carbon tax or cap-and-trade system) is necessary in China to raise the funds required for a large-scale implementation of CCS, because no utility company in China will equip its coal-fired power plants with CCS technology as long as there is no financial penalty for failing to curb emissions. The EU (even in combination with other industrialized states like the US, Japan and others) cannot reshape the structure of China's coal-dominated energy infrastructure and make it 'carbon capture ready'. EU foreign policy vis-à-vis China on this point is likely to remain limited to demonstrating the technological feasibility and mitigation potential of CCS in China through bilateral projects. Morse *et alia* (2009, 19-21) point out that international carbon markets or sectoral carbon market mechanism could potentially provide the "staggering scale of investment required" by recognizing CCS projects in China as

offsets in carbon markets.<sup>114</sup> The EU has proposed to recognize CCS projects in China as a potential future source of offsets. However, Morse *et alia* (2009, 21) warn that major obstacles remain for this to become a reality in China:

Purely apart from the financial capacity of the developed world to support CCS in China, there is the question of the political viability of a program, which could be seen by [Organisation for Economic Cooperation and Development] voters as steering technology and jobs on a massive scale to an economic competitor.

#### VI.5.2. Promoting renewable energy as an important part of China's energy mix

Given the major technical, financial and political challenges related to a large-scale implementation of CCS, another option for China is to 'leapfrog' from a coal-dominated energy mix and adopt the most advanced renewable energy technologies to implement a low-carbon energy infrastructure. In doing so, China, as an emerging economy, can avoid the high replacement costs incurred by more advanced economies (He & Qin, 2006, 103-104) and avoid a carbon "lock-in" of China's energy supply.

In the previous section on CCS-related developments in China, the EU's role was easier to trace. In the area of renewable energy, evidence that links EU foreign policy on climate change to China's new and growing interest in renewable energy is harder to find. However, the EU's promotion of renewable energy in China dates back to 2002, when the European Commission established the EU-China Energy and Environment Programme (2009) together with China, as a "reflection of both sides' desire to further

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<sup>114</sup> The EU has proposed to reform the CDM from a project-based mechanism to a sectoral carbon market mechanisms in order to "to capture mitigation contributions by developing countries by crediting against ambitious emission thresholds set below projected emissions to ensure a net mitigation benefit" (European Commission, 2010, 12). If e.g. China achieves reductions beyond the threshold in its power sector, China can receive credits that can be sold to developed countries as offsets, with which to finance further mitigation. Such sectoral carbon market mechanisms are a 'no lose': If the threshold is not met, there is no financial penalty, but no offsetting credits are generated either.

strengthen EU-China cooperation in the energy sector". The cooperation programme with various Chinese institutions focused on energy policy development, energy efficiency, renewable energy and the use of natural gas as a cleaner burning fossil fuel (EU-China Energy and Environment Programme, 2009).

Since the conclusion of the 2005 EU-China partnership on climate change, energy issues have been more than ever at the top of the EU-China agenda. One of the sectoral dialogues in the EU-China bilateral relations focuses exactly on the topic of ensuring "secure and sustainable energy supplies" (European Commission, 2005a). In particular, the EU's regulatory expertise can improve "China's technical and regulatory expertise" in this area (Commission, 2006, 5). As part of the EU-China partnership on climate change, another Action Plan on Industrial Co-operation on Energy Efficiency and Renewable Energies seeks to significantly reduce the cost of key energy technologies and promoting their deployment and dissemination by 2020. In the 12<sup>th</sup> EU-China Summit (2009), both sides agreed to further deepen "their Energy Dialogue, with a view to enhancing the use of clean and sustainable energy as well as global energy security", which will include "concrete cooperation in the fields of renewable energy, clean coal, bio fuel and energy efficiency". Key regulatory and financial innovations to promote renewable energy such as feed-in-tariffs originated in the EU Member States like Germany. However, we should be cautious about attributing the social learning about renewables that occurred in China over the last decade to the diplomatic efforts of the EU on climate change. In China's current economic context, renewable energy makes sense for China on many levels, both economic and environmental.

To begin with, renewable energy sources like wind, solar, hydro and biomass are plentiful within China. China has considerable potential for solar power, with "more than

two-thirds of China's land area [getting] more than enough sunlight to make the technology attractive domestically" (ChinaFAQs & World Resources Institute, 2010). Regarding China's wind power potential, estimates for China's onshore and offshore wind energy resources vary between 1000 to 3000 GW (Li *et alia*, 2010, 6). A study by McElroy *et alia* (2009, 1378) concluded that wind energy has considerable potential to displace coal-fired power plants as the energy source of choice to meet increased demand for electricity in China: "Assuming a guaranteed price of 0.516 RMB (US \$ 0.076 cents) per kilowatt-hour for delivery of electricity to the grid over an agreed initial average period of 10 years, it is concluded that wind could accommodate all of the demand for electricity projected for 2030, about twice current consumption". McElroy *et alia* (2009, 1380) estimate that meeting this goal will require a "large, but not unreasonable investment [US \$900 billion over 20 years] given the present size of the Chinese economy", which amounts to about a quarter of China's annual Gross Domestic Product.

Yet, this match between China's renewable energy potential and the political interest in its development is a relatively new phenomenon. Around the turn of the twenty-first century, there was limited political interest in wind energy, which was perceived to be "a technology reserved for wealthier countries" (Energy Foundation, 2010). A mere 10 years later, China has become the largest wind power market in the world. Wind power capacity has doubled every year over the last five years (ChinaFAQs & World Resources Institute, 2010).<sup>115</sup> However, the Chinese renewable energy market faced

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<sup>115</sup> While there is much to be excited about, China's renewable energy sector is also experiencing major growing pains. The electrical grid in China is not adapted to dealing with a massive amount of energy from wind. Due to this problem of transmission, Lu (2010) reports that 28% of turbines were lying idle, as "less than three quarters of China's 12.21 gigawatts of wind-power capacity was feeding into the grid last year". Major investments in China's grid capacity will be required to resolve this bottleneck (Curnow, 2009, 122; Umbach, 2010, 40). This why the State Grid

numerous institutional obstacles, which could only be overcome by “creating supportive policy, legal and institutional frameworks” (NCSD/CASS, 2006, 46-49). These exciting developments in China’s renewable energy industry did not occur spontaneously, but required the Chinese government to approve its Renewable Energy Law, which entered into force in January 2006. This law provides the provincial governments with a mandate to develop “feed in tariffs and quotas for the purchase of renewable energy within their locality and give renewable energy priority on the electricity grid” (Curnow, 2009, 120). This was quickly followed by the 2008 “Medium and Long-term Development Plan for Renewable Energy”, which set specific goals for hydropower, biomass, wind and solar for the period 2010-2020. The NDRC plans to increase the share of renewable energy sources from 7% to 15% between 2005 and 2020 by developing wind, solar, bio-mass, geothermal and hydro power. Given that wind power is the fastest-growing renewable technology in China, I focus on recent developments in this sector.

Compared to a total installed wind power capacity of 1.31 GW in 2005, China’s Renewable Energy Law fixed targets for 2010 (10GW) and 2020 (30GW). While a more than 20-fold increase in wind power over 15 years may have seemed ambitious in 2005, recent figures indicate that 25GW of wind power was already achieved in 2009 and Chinese officials are planning to achieve 100GW of wind power by 2020 (Curnow, 2009, 149-150; ChinaFAQs & World Resources Institute, 2010, 1). The Energy Research Institute of the State Grid Corporation even speaks of 150GW (Chen & Reklev, 2010). Other scenarios forecast a 200 to 230 GW BY 2020 (Li *et alia*, 2010, 9). Undoubtedly, the rapid growth of wind power is a major achievement for China. However, it is important not to focus exclusively on the absolute figures or how much GW capacity is

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Corporation will invest US \$ 255 billion to complete construction of strong smart grids in the nation by 2015 (Chen & Reklev, 2010).

being installed, but also on whether China's renewables sector is able to absorb increased electricity demand, i.e. its relative share in meeting China's growing energy demand. Dan (2010, 220) warns not to overstate the importance of wind power yet: "For example, renewable energy accounted for 8.1 of China's total primary energy consumption in 2006; the figure dropped to 6.4% in 2007, because fossil fuel consumption grew at a faster pace". McElroy *et alia* (2009, 1378) point out that wind, with an installed capacity of 12.2 GW at the end of 2008, supplies only 0.4% of China's total electricity supply. So, even with 100GW of installed wind power capacity today, China could only supply about 4% of its energy needs from wind. This illustrates the enormous challenge China faces to reduce its dependence on fossil fuels.

The rapid development of China's wind power would be impossible without the major subsidies paid by the Chinese central and regional governments under the 2006 Renewable Energy Law. Without these subsidies, wind power would not be competitive with coal-generated power. The price for wind power in China varies between US \$0.06 and 0.10 per kilowatt-hour, which is almost twice to three times as expensive as the electricity generated by coal (Lu, 2010; Curnow, 2009, 177). Given this major price difference, why is the Chinese government subsidizing this industry and generating this expensive electricity?

First of all, renewable energy sources play "a significant role in the increasing energy supply, improving the energy mix and helping environmental protection" (Curnow, 2009, 137). Developing renewable energy in China also enables the Chinese government to deal with the 'energy poverty' of China's rural population, which hinders rural economic development (Dan, 2010, 202). Unlike CCS, the development of renewable energy does create a number of 'co-benefits' in terms of reduced air pollution and improved energy

security. Aside from these two elements, there is an important third element at work in China's promotion of renewable energy and wind power in particular, namely 'localization'. Under the central government's national concession program, there is a provision that requires 70% of the value of turbines installed under the program to be manufactured in China. This requirement has led to joint ventures between Chinese companies and subsidiaries of foreign companies, which in turn helps China in its ambition to develop "a domestic base of engineers skilled in wind projects and wind turbine technologies" (Curnow, 2009, 122). Such a home-grown renewables sector plays into China's plans to enhance "technological levels and [establish] a complete industrial system", which will bring down the cost of renewable energy significantly in the next decade (Dan, 2010, 204). A strong Chinese renewables sector with a substantial share of the Intellectual Property Rights is considered important for the protection of China's national interest "amid a global competition in renewable energy development" (Dan, 2010, 207). China plans to invest up to US \$ 1.5 trillion over the next five years in strategic industries: Alternative energy, energy efficiency, alternative fuel cars and other environmental friendly technologies were identified as key future sectors (Rabinovitch & Kang Lim, 2010). Clearly, China and its decision-makers have traveled a long way and now appreciate the role that a renewable energy source like wind power can play in helping China to achieve a more diversified and therefore more secure supply of energy.

How the EU has contributed to the social learning among Chinese policy-makers in their development of low-carbon, climate-friendly policies? Freeman and Holslag (2009, 25-29) provide a comprehensive list of all the EU projects and the Overseas Development Aid provided by EU Member States that has been invested in the Chinese energy sector or projects related to climate change between 2000 and 2010. The total amount is EURO 1 billion, of which EURO 500 million consists of a loan by the European

Investment Bank.<sup>116</sup> Despite this considerable financial investment, I found little evidence of direct EU influence over China's energy policies, for example in the area of China's renewable energy policies. While tracing the exact impact of the EU's efforts is a methodological challenge, this discussion about the EU's efforts to promote renewable energy in China begs the question about the effectiveness of such development assistance to China. I would argue that China's growing concerns over energy security, particularly due to rapid increases in China's energy demand after 2004, are the main drivers of China's recent interest in the potential of renewable energy for China. A renewable energy source like wind power can play a major role in improving China's energy security, with none of the negative externalities of coal in terms of air pollution. Moreover, wind power can create green jobs and the development of cutting-edge technology. Wind power can also offer economic benefits for poorer regions such as Inner Mongolia, which has considerable wind potential. Last but not least, the future development of offshore wind parks allows a better match between the location of energy production and consumption in China's densely populated coastal regions.

Some preliminary conclusions can be drawn from the EU's experiences in the areas of CCS and renewable energy. The EU is unable to shift the ranking of China's priorities in a sensitive area like energy. European officials are also aware of this. Even concrete EU projects such as the financing for a demonstration plant on CCS are "peanuts" compared to the resources that China is moving within their own country: "So, it is more a political gesture of political will from the EU than something that demonstrates economic and political clout" (Author's interview, General Secretariat of the Council of the EU, Climate Coordination unit official, January 19, 2010). Rather, the EU's strategy vis-à-vis China is

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<sup>116</sup> In October 2010, the European Investment Bank (2010) approved a second China Climate Change Framework Loan of EURO 500 million (Blanchard, 2010).

to act as 'a catalyst', trying to speed up impending policy changes in China that are in line with the EU's priorities rather than trying to exert direct influence over Chinese policy priorities themselves. For example, the European Commission seeks to fulfil this 'catalyst' role by aligning its Country Strategy Paper for China with China's Five-Year Plan Cycle (Author's interview European Commission DG External Relations official, January 29, 2010). This approach by the EU stands in sharp contrast to the American diplomatic strategy of directly confronting China in order to exert influence over China's political priorities. This American approach to 'force' China to change direction has not paid many dividends until now. The EU's approach seems better adapted to engage Chinese policy-makers on issues that are of central importance to them.

#### **VI.6. The role of EU investments in the Clean Development Mechanism in China**

Apart from the inter-state dynamics of global climate negotiations, Bernstein *et alia* (2010) want International Relations scholars to broaden their analytical focus. Bernstein *et alia* (2010, 171) point to

how the centre of gravity in climate governance [has moved] away from traditional state-centric multilateral processes to multilevel governance whereby diverse, decentralised initiatives (like the growing of emissions trading systems in the 'global' carbon market) form the basis for the global response to climate change.

Even though the Clean Development Mechanism (CDM) is not an integral part of EU diplomatic efforts on China, it is relevant for the bilateral EU-China interaction on climate change, in particular as one of the offset mechanisms under the Kyoto Protocol. Domestically, the EU committed to a 20% reduction of CO<sub>2</sub> emissions below 1990 levels by 2020, but it also introduced a degree of flexibility or 'safety valve' under the EU's 2004 Linking Directive: European companies can meet the emission allowances that were allocated to them under the EU's ETS by buying cheaper Certified Emission Reductions credits through investments in CDM projects in developing countries. As a

result, “the EU ETS is the largest source of demand for CDM credits” (EU-China Facilitation Mechanism, 2009, 14-15). The EU’s Member States account for more than 75% of all investments in the CDM and of all 2507 registered CDM projects, China hosts 1027, or more than 40% (UNFCCC Secretariat, 2010a), and more than 1,000 Chinese CDM projects are still awaiting approval (Reuters, 2010). A recent report by the NGO Sandbag (2010d, 4) found that “China originated 41% of all [Certified Emission Reductions] surrendered into the ETS in 2008”. The total yearly investment of European companies in Chinese CDM projects amounts to EURO 1.5 billion per year “leveraging many times this amount of low carbon investment into developing countries” (Maybe, 2009, 1-2). In addition, the EU invested EURO 2.8 million in an EU-China CDM Facilitation Project, which aimed “to strengthen the CDM as a central pillar within China’s path to sustainable development” (EU-China Facilitation Mechanism, 2011). Clearly, the EU and China have found common in ground in how to promote a low-carbon energy supply for China in the CDM.

However, environmental organisations have harshly criticized the EU’s use of CDM credits to meet its own mitigation targets and have questioned the additionality and environmental integrity of projects registered under the CDM (e.g. Schneider, 2007; Schroeder, 2009b). Much criticism has focused on the dominant position of HFC and N2O CDM projects in China, whose contribution to China’s sustainable development and a low-carbon economy is questionable: “Of the 33,380,848 [CER credits] exported [from China], 94% of these were HFC or N2O credits” (Sandbag, 2010d, 4).<sup>117</sup> Based on these

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<sup>117</sup> This should not come as a surprise, because HFC projects represent 43.83% of total CER credits issued in China, already registered by the CDM, even though they account for just under 3% of the total number of CDM projects in China (EU-China Facilitation Mechanism, 2009, 31).

numbers, the CDM's contribution to helping China transition to a low-carbon energy supply is questionable.

Yet, European officials insist that the demand for offsets under the CDM, created by the EU's ETS, has produced a considerable constituency in China that is interested in energy efficiency and renewable energy:

The CDM has built a domestic momentum and constituency of companies and interests in key developing countries that are basically seeing that climate is a business opportunity. If you look at how CDM has changed the landscape in China [...] by creating that constituency, it is massive and has helped to drive the 'green economy opportunity' point home. CDM started an analysis of developing country companies to look at the way they operate, the way they use and waste energy, making them realise that there are money-making opportunities even beyond CDM (Author's interview, European Commission DG Environment official, January 8, 2010).

An overview of the CDM market in China backs up this statement and demonstrates that "there has been a marked increase in the participation of large-scale state-owned enterprises and investment groups" in the CDM (EU-China Facilitation Mechanism, 2009, 46). There are also a number of Chinese developers among the top 20 CDM Project Developers in China. These include e.g. Tsinghua University, China's equivalent to the Massachusetts Institute of Technology in the US, 27 regional CDM service centres throughout China and newly established joint venture consultancy companies, all of which have an interest in a thriving CDM market.<sup>118</sup> While climate-related financial investments in China only account for a tiny fraction of total foreign direct investment, the same cannot be said for the renewable energy sector: "More than 60% of the investment comes from bilateral and multilateral institutions" with domestic investments accounting for the rest (NCSD/CASS, 2006, 55). This example again serves to demonstrate the

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<sup>118</sup> Wubbeke (2010, 35-36) also highlights how Tsinghua University has close ties to China's National Development and Reform Commission and is in a position to make "valuable recommendations" to China's leadership.

catalyst function of foreign investment for a sector such as renewables in China. An official from the European Commission delegation to China put it as follows:

The evolution of the CDM in China plays directly into the EU's foreign policy objectives on climate change in China. And the relatively small investment of the EU in an EU-China CDM Facilitation Project and other capacity building projects have helped this process along, as it helped to overcome barriers in the implementation of CDM in China (Author's interview, European Commission Delegation to China, January 21, 2010). This evolution of the CDM in China plays into the EU's foreign policy objectives on climate change in China. European funding for project such as the EU-China CDM Facilitation Project and other capacity building projects have helped to address the barriers in the implementation of CDM in China, which included "a lack of CDM awareness among potential project owners, government officials, and financial institutions; a lack of capacity to develop complex CDM projects; and a lack of capacity to actively participate in the international carbon market [...]" (Schroeder, 2009c, 376).

According to Article 12.2 of the Kyoto Protocol, the CDM should serve two purposes: On the one hand, the CDM aims to assist developing countries in achieving sustainable development, while, on the other hand, helping Annex I countries comply with their mitigation targets under the Kyoto Protocol. The CDM will definitely accomplish the latter objective for the EU. With regard to the first objective, the jury is out as to whether the CDM can help China onto a path of sustainable development or not.

Most opportunities for HFC destruction worldwide appear to have now been exploited (Lecocq & Ambrosi, 2007, 141-142). The numbers in China confirm this trend. Of the 1600 Chinese CDM projects in the pipeline, only 11 projects deal with HFC, while 1304 are hydro, wind and energy efficiency projects (EU-China Facilitation Mechanism, 2009,

46).<sup>119</sup> It is important to note that CDM host countries like China can set their own criteria for project approval and thereby steer CDM investment towards a transition to a low-carbon economy. Schroeder (2009c, 391) concludes that the Chinese government has been able to utilize the CDM for its own priorities. By adding its own requirements, China has been able to finance its preferred projects by focusing on energy efficiency improvement, development and use of new and renewable energy, and methane recovery and use.

The CDM also helps China's mitigation efforts indirectly. China established a CDM Fund in 2006 that will be mainly financed from high taxes levied on CDM CER credits outside the priority areas, e.g. a 65% tax on HFC projects. With up to EURO 1.5 billion in funding (Schroeder, 2009c, 379), the CDM Fund will focus on activities, directly related to CDM in China, but will also engage in a wide range of climate related activities, such as public awareness raising, mitigation activities and focusing on adaptation to climate change. In China, the CDM has real potential to contribute to the realization of the objectives in China's National Climate Change Programme. However, China could do even more to better exploit the CDM market opportunities. The EU and its ETS, as the largest buyer of CER credits from China, could use its position to ensure that the quality of CDM projects improves in the next trading period – post-2012 – and that these offsets genuinely contribute to a low-carbon energy strategy for China. Banning offsets sourced from industrial gas-destroying projects could bring about a major boost for investments in energy efficiency, renewables and – maybe in the future – CCS-related projects. The proposal tabled by the European Commission (2010b, 4) for “a more targeted approach to the use of international credits in the EU ETS” and effectively banning HFC-23 and

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<sup>119</sup> These 11 HFC projects still generate almost 20% of China's CERs, but wind, hydro and energy efficiency combined now generate almost 50% (EU-China Facilitation Mechanism, 2009, 46).

N2O projects after 2012 in the ETS is to be welcomed in that respect.

## **VI.7. Conclusion**

Umbach (2010, 69) recommends that the EU do the following:

In order to have a greater influence on the direction of China's energy and environmental/climate change policies, it will be important for the EU to take China's views, perception, and political-economic priorities more seriously and develop an understanding of them.

In my view, the EU has done exactly that. The description by a Commission official of the catalyst function of the EU's diplomacy towards China is a useful metaphor to understand the bilateral climate change dynamics between the EU and China. The EU is aiding China to speed up its transition away from an energy mix with a high carbon intensity to a greater focus on energy efficiency, CCS and low-carbon energy sources. Promoting an agenda focused on a secure supply of low-carbon energy in China, the world's largest emitter, played directly into the EU's pursuit of its overall goal on climate change, namely limiting global warming to 2 degrees Celsius.

Given the importance of social learning to help explain recent changes in the Chinese political leadership on climate change, the EU climate diplomacy chose the right strategy of providing China's leaders with the right 'frames'. Given the pre-occupation of Chinese leadership with continued economic growth, demonstrating that more ambitious mitigation strategies will not negatively impact, and can even enhance China's Gross Domestic Product, was crucial. The EU's focus on improving bilateral cooperation with China on environmental issues helped Chinese policy-makers to understand that China will be one of the countries most affected by climate change with a considerable economic cost. More importantly, the EU's relatively moderate investments in CCS and renewable energy in China helped to address the bottlenecks in China's energy supply,

improving China's energy security. Tackling climate change will require a major mitigation effort, which will in turn demand a major reorientation of how the world economy is fuelled. Until today, there continues to be a close link between economic growth, increased fuel consumption and rising emission trends. However, major questions loom about the future energy supply for the world economy. By linking climate change and possible mitigation policies to energy security, 'peak oil', and the perspective of a multiple trillion market for renewable energy in the next two decades, the EU was able to achieve a degree of 'social fitness' with the prevalent domestic political discourse in China.

The focus on China's leadership may have been necessary to get a 'top-down' commitment, but European investments in CDM projects in China also helped to create a 'bottom-up' constituency within China that supports low-carbon development of the Chinese economy. Without the demand for credits generated by the EU's ETS, this win-win-situation would not have materialised. The dominant position of the ETS in China's CDM market also gives the EU leverage over future CDM investments, which it can require to be channelled more specifically towards China's transition to a low-carbon energy mix.

Determining exactly how much of the changes in China's climate change policies are directly linked to the EU's persuasiveness is a methodological challenge. This chapter found evidence for the EU's role in promoting a better understanding of the impacts of climate change among Chinese leaders and the potential of CCS for China. However, major technological and financial difficulties remain to implement CCS technology on a large scale in China. The EU's funding for CCS demonstration projects does little to address these issues. With regard to the increasing role of renewable energy in China,

the evidence for European influence is less clear-cut. This chapter pointed mainly to domestic factors driving China's appetite for wind and solar power. What can be said more generally is that the EU assessed the Chinese priorities on climate change and cleaner energy accurately and has successfully engaged China, particularly compared to US diplomacy.

In conclusion, the best way for the EU to convince China of the need for more ambitious mitigation targets is to showcase that the 'green economy' pays off economically. Such EU leadership – or policy coherence, as it was conceptualized in chapter 4 – is likely to be more effective in inspiring the ongoing paradigm shift in China with regard to low-carbon economic development, than stepping up bilateral cooperation with China in the EU-China Partnership on Climate Change. Unfortunately, the EU's leadership position on climate change has been under attack since the start of the current economic downturn. Discussions about carbon tariffs, the risk of 'carbon leakage' for the European economy and the reluctance to move from a 20% to 30% mitigation target show the EU's lack of appetite to live up to its self-proclaimed role as climate leader.

In contrast, China is pushing ahead with its significant share of 'green' stimulus spending. Today, most of the world's solar panels are manufactured in China. Chinese car companies are investing massively in the development of electric cars. It seems that China has taken the EU's message of shifting its economy on a low(er)-carbon growth trajectory to heart. The first-mover-advantage of the EU in future growth sectors, such as renewable energy, could quickly be eroded by the actions of Chinese industries and policy-makers, impacting the future competitiveness of the European economies. In order to remain credible as a leader on climate change, it would be wise for the EU to view the short-term cost of ambitious mitigation targets as a long-term investment in the

EU's green competitiveness. Otherwise, CDM projects in China, purchased as offsets by European companies, will finance their future competitors for low-carbon technologies in China. Given the impetus and scale of recent changes in Chinese climate and energy policies, it would be wise for the EU to live up to its leadership role and push ahead with a programme that includes ambitious mitigation targets and massive investments in renewable energy. If not, the EU's 'first-mover advantage' in a future low-carbon economy will quickly turn into a 'second-mover advantage' or worse.

## **Chapter VII: Concluding remarks**

*Now we have a marketplace that is rigged  
to reward the dirtiest, filthiest, most addictive,  
most destructive, most damaging, fuels from hell,  
rather than the cheap, clean, green,  
abundant, safe and wholesome fuels from heaven.  
We need to switch that around.*

Robert F. Kennedy Jr. (The Solar Industry, 2009)

### **VII.1. Summing up the research findings**

Has the EU contributed to the emergence of a global mitigation norm and if so, how?

The short answer is: Yes, but only to a limited extent and more could have been achieved. This answer contains three elements, which I discuss in order. An emerging global mitigation norm has taken root within the EU and functions as a 'regulative norm' on the behaviour of the EU. For example, the development of the EU's domestic climate policies is driven by a clear concern about the environmental impact of climate change. The EU's proposals for mitigation targets frequently refer to science-based recommendations of the Intergovernmental Panel on Climate Change. In addition, there is a recognition of historical responsibility of advanced industrialized states and the need for their leadership in reducing their emissions first. The EU's foreign policy on climate change has contributed to raising awareness about climate change and its impacts, which has led to a recognition in the Copenhagen Accord of the EU's longstanding definition of 'dangerous climate change' as a maximum 2 degrees Celsius increase in global average temperatures. Helped by a global mobilisation of environmental civil society organisations, the EU has contributed to 'a sense of urgency' about climate change. The Copenhagen Accord recognizes that "deep cuts in global emissions are

required” and that cooperation will be necessary to “[achieve] the peaking of global and national emissions as soon as possible”.

Yet, the EU’s achievements in the promotion of a global mitigation norm can be considered a Pyrrhic victory. While progress has been made in gaining recognition for a norm that requires states to reduce their emissions, the ‘norm robustness’ of a global mitigation norm remains weak. The specificity, durability and concordance of a global mitigation norm remains problematic. This is true within the EU as well as in the global discussions on climate change. I discuss this internal and external dimension of the EU’s promotion of a global mitigation norm in turn.

Though the global mitigation norm is more robust within the EU than anywhere else, there is no unanimous agreement within the EU about how to translate this climate leadership in genuinely ambitious targets. A set of powerful ‘norm resisters’ within the EU have tempered the EU’s ambitions on climate change. The important role of norm resisters in the EU demonstrates that new environmental norms, for example a global mitigation norm, do not emerge in a political vacuum, but enter into a contested domestic context, “where norms compete with explicit counter-norms” (Elgstrom, 2000, 473). For example, Poland is concerned about the impacts of ambitious mitigation norms on its secure supply of energy by coal-fired power plants fuelled with Polish coal. Governments like Italy consistently advocate the view of (some) European businesses that unilateral European action will further undermine the competitiveness of the EU’s economy in the absence of comparable action elsewhere, killing the chance of economic recovery from the current ‘great recession’. This crucial role of norm resisters echoes Nagtzaam’s (2009, 317-318) conclusion that “the Constructivist analysis of norm development is limited when it comes to norm failure in circumstances where entrenched interests hold

sway". This point about entrenched interests is particularly relevant for climate policies. As energy production and emissions are closely linked, such entrenched interests in the fight against climate change refer to long-standing links between state and corporate actors, particularly energy companies and their close involvement in the development of energy policy. Such entrenched interests, represented by norm resisters like Poland and Italy in the EU's decision-making process, have shaken the EU's attachment to a global mitigation norm. Despite widespread support for a 'first mover advantage', the continued framing of ambitious mitigation targets as a hindrance for the EU's global economic competitiveness continues to resonate in European political debates and negotiations, which resulted in relatively low mitigation targets. The EU's internal hesitations about its global ambitions on climate change are well understood by the EU's negotiating partners, which in turn undermined the credibility of the EU as a 'leader' on climate change.

The negotiations during the Copenhagen climate summit demonstrated that the EU was unable to find a compromise between China's 'principled' stance on the West's historical responsibility for climate change and the American position to find a 'pragmatic' solution to the climate challenge by dealing with current emissions from the world's largest emitters. The EU tried to lead by committing to a unilateral 20% mitigation target and by proposing a conditional 30% target, if other industrialized states and the large emitters from developing states committed themselves to comparable emission reductions (Council of the EU, 2009, 3). However, the EU's diplomatic offer was ignored and the EU was sidelined in the final negotiations on the Copenhagen Accord. The Copenhagen Accord did not make any real progress in strengthening the 'norm robustness' of a global mitigation norm. Different interpretations of the Common But Differentiated responsibilities (CBDR) principle by North and South, and the US and China in

particular, remain a major stumbling block for a compromise about who should reduce emissions by how much and what the timeline for these mitigation efforts should be. UNFCCC members are now engaged in a post-Copenhagen bottom-up process, where national governments submit targets that they themselves consider economically feasible. This exercise is fundamentally different from negotiating a legally binding treaty with science-based mitigation targets and is unlikely to contribute to the overall robustness of a global mitigation norm.

In Copenhagen, the EU's negotiation partners were reluctant to recognize the EU's claim to leadership. The old adage 'practice what you preach' is relevant to evaluate the EU's role in the promotion of a global mitigation norm. The EU's position in Copenhagen was welcomed as a constructive contribution to the negotiations. However, the EU's low level of ambition on mitigation was not considered to be fundamentally different from the proposals of the Obama administration on mitigation targets for the US economy. Both industrialized and developing states viewed the EU's compliance with the Kyoto Protocol target as insufficiently driven by climate policies. The surplus 'hot air' Assigned Amount Units in Eastern Europe provided the EU with abundant cheap mitigation options. The EU's heavy reliance on international offsets of questionable 'environmental integrity' further undermined the EU's claim to leadership. Chapter IV conceptualised this combination of the EU's own leadership rhetoric and the negative external perceptions of the EU as a low level of policy coherence for the EU's stance on climate change. This low level of policy coherence led to a 'reality check' for the EU's leadership ambitions in Copenhagen.

I included in my analysis the domestic political-economic context of both EU and China and the role of their respective energy mixes. In doing so, my research not only

addresses one of the lacunae in Constructivist theory-building, but also shows that there remains a clear hierarchy of norms, both in the EU and China. Concerns about promoting economic growth and improving competitiveness in a globalized economy dominate the political discourse in both the EU and China, despite their very different positions in terms of economic development. Yet, environmental priorities can work their way up the political agenda insofar as they are framed to contribute to economic success or avoid negative economic impacts. The debate about climate change and emission reduction strategies shows that an emerging global mitigation norm can move relatively quickly up the list of political priorities, if there is, to paraphrase Bernstein (2001) a social fitness between the global norm and the dominant domestic political discourse.

Despite the failure in Copenhagen, the EU did contribute to a growing interest in policies designed to implement a low-carbon energy. Such policies can contribute to future emission reductions, but a growing attachment to a global mitigation norm is not necessarily the main driver behind this. Economic reasons also play a role in a greater interest of states as well as companies to reduce their emissions. This is again the case both within the EU and elsewhere. First of all, there is a growing belief among a wide range of actors in the EU that moving their economies towards a low-carbon transition can give the EU a 'first mover advantage'. The benefits of a low-carbon economy include a strong position for European companies in a future growth sector like renewable energy. Investments in energy efficiency and renewable energy create 'green jobs' and improve the EU's energy security. The EU has also tried to 'export' ideas about the benefits of ambitious climate policies outside of the EU, in particular China. In the 2005 'EU-China Partnership on Climate Change', the EU played its role, not as a Normative Power Europe, but as a 'civilian power' with specific technological and regulatory

expertise that can help China in reducing its emissions, while not impeding economic priorities. By focusing less on overall mitigation targets and more on solutions for China's climate and energy-related challenges, the EU helped a process of 'complex learning' along among China's political elite. Despite China's coal-dominated energy mix, the belief in the economic benefits of more renewables and other forms of low-carbon energy is catching on, as China's growing consumption of coal and imported oil is clearly unsustainable and undermining its energy security. In contrast to the doom and gloom of UNFCCC negotiations and reports of climate scientists, this gives some hope that ambitious emission reductions can be achieved, as several economies in both North and South start the global economic battle for a 'first mover advantage' in the future low-carbon economy.

## **VII.2. Evaluating the explanatory power of Constructivism**

This thesis used Conventional Constructivism as its main theoretical background, but also demonstrated its limitations. By engaging with critiques of previous work by Constructivist scholars, this thesis makes three contributions to the Constructivist research programme. First, I address the need to take into account how human rights norms and environmental norms are different. Secondly, the distinction between 'norm leaders' and 'norm followers' does not apply to an emerging norm on mitigation. Thirdly, a study of environmental norm diffusion must tackle how domestic political structures and the political economy of a national energy mix enable or delay the successful diffusion of the norm in question.

### VII.2.1. Recognizing the specificity of environmental norms

As suggested in the literature review, Constructivist research on norm diffusion has been criticized for its selection bias in favour of the successful diffusion of 'good', progressive norms such as the prohibition of torture or the anti-racism norm. This research has resulted in a theoretical framework focused on morally unambiguous norms with a universal applicability such human rights. This theoretical framework cannot be transferred to the diffusion of environmental norms without some major modifications. A global mitigation norm is an environmental norm that is different from human rights norms in five ways.

First, a global mitigation norm is much more contested than human rights norms and competes with other norms that prescribe the 'right' economic and energy policies for a specific state. In contrast, human rights norms are more absolute, as their importance is widely accepted to transcend other economic, security, environmental considerations. For example, human rights need to be respected in Zimbabwe, regardless of that country's dire political and economic situation. Furthermore, there continues to be a well-established hierarchy of norms that prioritizes economic growth over environmental concerns. Emphasizing economic growth or energy security is in my view not an expression of a non-normative concern, but rather a different understanding of the "collective expectations for the proper behavior of actors with a given identity" (Katzenstein, 1995, 6). For example, a global mitigation norm competes with other norms such as 'good states promote national competitiveness in a globalized economy' and 'good states prioritise energy security when a secure supply of energy is at risk'. These 'economic' norms tend to be more salient in decision-making at the national level and, as a result, have more influence on how foreign policy positions are formulated. In

spite of growing support for greening the economy, the view that environmental protection and reduced emissions comes at a considerable economic cost is still widely held around the world. This limits the ‘social fitness’ of environmental norms with these dominant economic norms. The concept of sustainable development – as defined in the Brundtland report (Brundtland, 1987)<sup>120</sup> – tries to square the circle by seeking to balance social, economic and environmental considerations. However, the ‘norm robustness’ of sustainable development is weak: “[W]hile there may be a relative consensus that some form of sustainable development strategy is a necessity for future progress, a clear understanding of what exactly such a strategy must entail remains open for negotiation” (Lightfoot and Burchell, 2007, 77). The same is true for a global mitigation norm: All agree that global warming should remain limited to maximum 2 degrees Celsius, but who should reduce emissions when and how remains a divisive issue.

This brings me to a second difference between human rights and environmental norms. A *global* mitigation norm does not imply the same responsibilities for all states. The relevance of the CBDR principle is recognized for many global environmental norms. This principle has three dimensions. First, it identifies the historical responsibility of industrialized states and the current, unsustainable consumption patterns for creating many of the world’s environmental problems. Linked to this responsibility is the principle that ‘the polluter pays’. In addition, the CBDR principle highlights the different *per capita* emission levels of industrialized and developing states, which shows that industrialized states and their populations occupy a disproportionate share of ‘environmental space’. The CBDR principle also highlights the more advanced financial, technological and regulatory capabilities of industrialized states to reduce their emissions, compared to

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<sup>120</sup> The Brundtland Commission defined sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987).

developing states. These three elements demonstrate that a North/South dimension is central to a global mitigation norm, which is fundamentally different from the universal applicability of human rights norms.

Linked to this issue, a global mitigation norm and environmental norms generally have a trans-boundary, distributional aspect that human rights norms lack, “which often [implies] that costs are concentrated while benefits are broadly distributed” (Skodvin *et alia*, 2010, 854). If the EU cuts its emissions by 100% tomorrow, such a rapid decline will come at a considerable cost, as its economy will come to a complete standstill. However, such a drastic measure will at best only delay some of the worst impacts climate change, if emissions continue to rapidly increase elsewhere. In contrast, an exemplary human rights record in state X does little to improve the human rights abuses in state Y and vice versa. Human rights norms lack a distributional aspect. Tackling a global environmental problem such as climate change requires a global solution with all major stakeholders involved. Exemplary unilateral commitments to abide by a global mitigation environmental norm will be costly and unable to ‘solve’ the climate crisis. Nonetheless, a demonstration by the EU of how reduced emissions and less reliance on fossil fuels can be turned into an economic success story could prove to be an inspiring ‘learning experience’ for other governments.

Fourthly, a global mitigation norm requires an active involvement of public authorities in how a national economy produces, transports and uses energy. In contrast, human rights norms such as the prohibition to torture or freedom of speech, mainly require states *not* to engage in specific activities. A global mitigation norm requires active government intervention to realize a shift towards low-carbon sources of energy. Some human rights norms such as gender equality have also required a major regulatory

intervention, positive action and awareness campaigns to guarantee the equality of men and women in the workplace. However, this has never required a multiple billion dollars – maybe even a trillion dollars – investment over a relative short time frame of a decade. Thus, an exclusive focus on norm entrepreneurs and their actions vis-à-vis policy-makers is insufficient. Apart from the dyadic dynamics between norm entrepreneurs and states, a wide range of corporate actors such as energy companies, energy regulators, high-tech companies, carbon markets are all involved in transitioning to an energy mix that can guarantee a stable supply of energy with reduced emissions. Implementing a low-carbon strategy requires a commitment from all levels and branches of governments as well as an economy-wide effort in a way that respect for human rights does not (to the same extent). Complying with mitigation targets requires a comprehensive energy strategy, improved building codes, transport regulations, greening fiscal instruments and so on.

Finally, there is the question of time. Environmental norms on the protection of endangered species, the protection of fish stocks against over-fishing or the protection of rainforests have a time dimension that human rights lack. To put it succinctly, it is never too late to start respecting human rights, whereas environmental norms often have an 'expiry date'. The successful diffusion of environmental norms can be a matter of 'too little, too late', when the environmental damage is irreversible. This is especially true for a global mitigation norm. In order to achieve the 2 degrees Celsius target, the world needs to let its emissions peak by 2020 and quickly reduce afterwards. Global warming beyond this threshold will lead to unmitigated climate change, which will start a series of positive feedback loops. At that point, more ambitious action on mitigation will be

overtaken by events and the discussion will shift to how populations can adapt to the impacts of climate change.<sup>121</sup>

To conclude, we can speculate that in a couple of decades, as the impacts of climate change become (even more) evident and the scale of environmental problems increases, a global mitigation norm will be universally accepted and overtake economic norms in importance. We might see the day when public opinion and policy-makers will look back at the political debates at the end of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century in disbelief that world leaders preferred to carry on with ‘business as usual’ and a continued reliance on fossil fuels rather than prioritizing an effective response to climate change.

#### VII.2.2. Problematizing the distinction between ‘norm leaders’ and ‘norm followers’ in the norm diffusion of a global mitigation norm

As indicated in the previous section, environmental norms are more contested than human rights norms. This also has implications for the Constructivist conceptualisation of norm diffusion as a form of “norm cascade” after a “tipping point”, when a sufficient number of states accepts the norm (Finnemore & Sikkink, 1998) or the “spiral model” of norm diffusion of Risse, Ropp and Sikkink (1999). This Constructivist conceptualisation of norm diffusion as a process between norm leaders and norm followers (and norm entrepreneurs) is problematic for environmental norms.

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<sup>121</sup> A wide range of positive feedback loops is predicted to happen, if the planet warms up beyond 2 degrees Celsius. Warming permafrost will release methane, a more powerful greenhouse gas than CO<sub>2</sub>. The retreat of sea ice will result in fewer sunrays being reflected back into space. Rising temperatures will lead to longer drought periods, resulting in more forest fires, releasing more CO<sub>2</sub> in the atmosphere. The combined effect of these feedback phenomena is an enhanced greenhouse effect in the atmosphere.

The clear-cut distinction between norm leaders and norm followers does not stand up in the analysis of an emerging global mitigation norm. Continued disagreements about the correct interpretation of the CBDR principles stand in the way of strengthening the norm robustness of a global mitigation norm. Continued negotiations are needed to find a compromise position. Chapter V demonstrated how the negotiations in Copenhagen cannot be characterized as a one-way process in which norm leaders in the North tried to persuade norm followers in the South. Rather, the US and China exemplified two radically different approaches about how to tackle climate change. I label the American position as the 'pragmatic' one, whereas the Chinese position can be labelled as 'principled'. Within the US, there is rare bipartisan agreement that multilateral discussion on climate change should focus on the current state of global emissions. This explains the American focus on 'major economies', which is equivalent to all major emitters. The US has repeatedly brought these actors together in the Major Economies Forum. This category of 'major economies' is however not recognized in the UNFCCC context, which only recognizes two categories, the industrialized and developing states, in line with the CBDR principle. This focus on current emissions is, however, disputed by developing states and China in particular. Chinese diplomats want to shift the focus away from addressing current emission levels onto questions of the West's historical responsibility for causing climate change. Because of this historical responsibility, a large group of developing states firmly believes that industrialized states should provide leadership and reduce their emissions first before developing states commit to limit emissions increases or a peak year for their emissions. The EU's position falls somewhere in between the American 'pragmatic' stance and the Chinese 'principled' stance, although the EU is closer to the US than China on most issues, except on the extension of the Kyoto Protocol.

In addition, buoyed by their economic success, China and the BASIC group, which includes Brazil, India and South Africa as well, have the confidence to not only resist calls from the North to commit to binding targets, but also to act as norm leaders in their own right. By focusing on the EU as a Northern norm leader, this thesis could not analyse how China acts as a norm leader in the promotion of its 'principled' interpretation of the CBDR principle on climate change. However, the results of the Copenhagen Conference speak to the widespread support for China on this issue. It was no small achievement for Chinese diplomacy to keep the very diverse coalition of oil-exporting states, small island states, least-developed states and emerging economies more or less holding the same line throughout the Copenhagen summit. In addition, the Copenhagen Accord reflects more closely China's 'principled' position than the US Secretary of State Hillary Clinton's call for emerging economies to be "pragmatic" rather than "dogmatic" (Clinton, 2009). Researching how developing states and China have been able to promote the centrality of equity concerns in global environmental regimes – in the face of strong opposition from industrialized states – can lead to a valuable research agenda for Constructivists in the future.

### VII.2.3. Importance of the domestic political context for explaining norm diffusion

Constructivist research has also focused attention on how international norms have had an impact at the national level through a process of socialisation. However, the mechanisms that influence such norm diffusion from the global to the local/national level have remained under-theorised. An overly structuralist view of norm diffusions fails to acknowledge the domestic political context. Specifically for global mitigation, this domestic political context includes both normative and material factors.

As to the domestic *political* context, there needs to be a 'social fitness' between the global norm and the domestic political discourses for a successful diffusion to take place. Given the dominant emphasis on economic growth and international economic competitiveness, environmental norms will likely only be successful if they are perceived as compatible with a given domestic political discourse, dominated by economic concerns. This led me to explore not only how robust a global mitigation norm is within the EU, but also how ideas about a 'first mover advantage' for the EU in a low-carbon transition facilitated more ambitious mitigation targets. My research also demonstrated how the EU framed its approach to China in a way that 'fit' with Chinese concerns about continued economic growth and energy security.

However, the effectiveness of framing for successful norm diffusion remains limited by the domestic *material* context. In particular, a country's national energy mix is the result of a confluence of different elements, such as the availability of fossil fuels, the potential for renewables, the reliability of foreign energy suppliers, and so on. National energy mixes tend to be path dependent. In other words, reducing emissions is more costly for some states than for others due to the wider range in carbon intensity levels of national economies. My research has focused specifically on the national energy mixes that exist in the Member States of the EU and China, as there is a close link between emissions and energy production and consumption. For the EU, particular attention was paid to how the political economy of Member States' energy mixes can qualify their support for an emerging global mitigation norm. Without an analysis of their domestic energy mixes, we cannot understand why some Member States advocate for ambitious mitigation targets and others do not. The diversity within the EU is considerable. Some states like Poland rely heavily on carbon-intensive sources of coal, whereas others like France have built up over several decades a high reliance on nuclear energy, which happens to

be a low-carbon fuel source. The early adoption of feed-in tariffs led to the creation of local renewable energy companies in Spain and Germany, whereas other Member States like Italy missed the boat. Some Member States have great potential to generate renewable energy such as offshore wind power in the UK, whereas the potential for renewable energy in a land-locked state like Slovakia is much lower. Some have great concerns about their energy security such as Lithuania, which relies on gas imports from Russia, whereas others have a more diversified energy mix. Without an understanding of the domestic energy context of Member States, it is impossible to develop an understanding of how influential a global mitigation norm has been in the negotiation of the 2008 Climate and Energy Package or in discussions about increasing the EU's unilateral mitigation target from 20% to 30%.

This is not different for China, whose attachment to a global mitigation norm is complicated by the dominant position of coal-fired power in China's energy mix. China has taken steps to improve the energy efficiency of its energy mix and reduce the central role of coal by diversifying its energy mix with renewable and nuclear energy. International pressure from an emerging global mitigation norm may have played a role: China's position as the world's current largest emitter became more problematic, as the multilateral negotiations on climate change intensified leading up to Copenhagen. However, concerns about the secure supply of energy to fuel China's rapid growth played a greater role in China's increased interest in low-carbon energy sources like renewable energy. As discussed in Chapter VI, China has considerable potential for wind, solar and hydropower.

### **VII.3. Evaluating the EU's leadership role**

The EU contributed to the emergence of a global climate change norm. Could the EU have done more? Very likely, but this is very much a 'glass half empty, glass half full' discussion. While the rhetoric of some European politicians about the EU's leadership on climate change may give a different impression, the EU's unilateral 20% and its conditional 30% mitigation targets reflected a carefully calibrated compromise within the EU. The compromise of the 2008 Climate and Energy Package recognized the very different starting positions of its Member States in terms of their ability to transition quickly to a low-carbon economy.

One common critique of the EU's foreign policy action is the gap between the high expectations and the actual capabilities of the EU, the famous "capability-expectations gap" (Hill, 1993). This was true for the EU's efforts to develop a Common Foreign and Security Policy and its European Security and Defence Policy. This critique also applies to climate change with some adjustment. In the early 1990s, the US created high expectations for the EU's ambitions in the realm of security and defence. In contrast, the high expectations for the EU's leading role on climate change were mainly generated from within the EU. European leaders made the mistake of creating high expectations for playing a pivotal role in Copenhagen and came away disillusioned.

The discussion of the EU's lack of policy coherence in Chapter IV showed that the discrepancy between words and action is a key factor in understanding why the EU was sidelined in crucial negotiations on the final day of the Copenhagen climate summit. While this was not specifically addressed in my research, the evidence presented in this thesis leads me to think that the demands of American diplomats for legally binding

commitments for China in the context of the UNFCCC will continue to fall on deaf ears in China, as long as there is no perspective of meaningful climate policies in the US. This shows that the applicability of policy coherence is not limited to the EU alone. With the importance of policy coherence in mind, the credibility and effectiveness of the EU as an international actor would be helped along, if the EU and its diplomacy set the bar a bit lower for itself by recognizing how its internal diversity necessarily limits its ambitions. More modest ambitions for the EU in its foreign policy on climate change could free up space and time to reflect on how its internal agenda of a low-carbon energy future can advance.

Particularly in an area like climate change, where tensions between North and South run high and accusations of neo-colonial attitudes are never far away, acts speak louder than words. I think European politicians could help the EU's international stature by presenting the EU less as a Normative Power and more as a civilian power with very specific regulatory and technological expertise. For example, no other actor in the global climate regime has the required expertise on how to build a functioning carbon market on a continental scale. EU Member States like Germany pioneered the use of feed-in tariffs to promote take-off for renewables and with great success. EU-level directives such as fuel efficiency standards for cars can become a worldwide benchmark, akin to the role that California plays in North America. Last but not least, the EU is the largest supplier of humanitarian and development aid, which can be another avenue to promote the EU's expertise with renewable energy. The EU could help developing countries to simultaneously deal with the energy poverty of their populations as well as avoid 'locking' themselves into a high-carbon growth trajectory.

The key to progress in the multilateral climate change negotiations, and particularly binding commitments for emerging economies like China's, is achieving substantially reduced emissions in industrialized states without wrecking their economies. Even if the EU complied with China's demand for a 40% mitigation target or agreed on a 50% mitigation target, this would not fundamentally alter the dynamics of the international negotiations on climate change. As mentioned in the conclusions of chapter V, the EU's mitigation targets are not climate solutions. China and the other BASIC countries maintain a 'you first' attitude and will only consider legally binding mitigation actions, if industrialized states implement a successful economic strategy that demonstrates how economic growth and rising emissions need not go together. The past mitigation record of the EU, the US and other industrialized states inspires developing states with little confidence that this is possible. If service-based economies like the US and the EU with their advanced financial and technological capabilities cannot substantially reduce their emissions, any binding commitment for a peak in emissions from a rapidly industrializing state like China will likely remain a 'pipe dream'. Industrialized states honouring their commitments with concrete deeds will likely be the only element that can change the reluctance of Chinese policy-makers to commit to a peak year for Chinese emissions.

It logically follows from the previous point that the conceptualisation of the EU as a 'Green Normative Power' not only offers little explanatory power, but is also misleading. Diez's (2005, 620) warned that the academic Normative Power Europe concept is too close for comfort with the "normative discourse [...] that most European politicians – in Council, Commissions and Parliament as well as on the Member State level - engage in unless they are committed Eurosceptics". Diez (2005, 615) argues instead

for a greater degree of reflexivity, both in the academic discussion about normative power, and in the political representations of the EU as a normative power, which I see as part of the same discourse. Rather than

the zealous propagation of particular 'European' norms, it would be such a degree of reflexivity that would make 'normative power Europe' stand out.

Chapter III brought about a greater degree of reflexivity and demonstrated that the EU is not at all normatively predisposed to act on climate change, as the Normative Power Europe literature would lead us to believe. The concept of 'policy coherence' in Chapter IV is another tool to critically reflect on the EU's leadership rhetoric. While I agree with Manners (2002, 252) that the Normative Power concept can stimulate discussion about what the EU *should* be doing, it offers little in terms of describing what the EU does to change norms in the international system. Particularly on climate change, the EU's leadership claims are a case of 'hot air' that scholars should critically examine, not reinforce.

#### **VII.4. Evaluating China's role**

China is and remains a big question for everyone with an interest in the future of international politics. The pace of change and economic development is so fast and unprecedented in scale, with global repercussions that it would be foolish to 'sum up' a definitive verdict about China's role in world politics and its influence on the future shape of the world's energy supply. Much of the media coverage on China and its remarkable economic story gives contradictory messages. One camp believes that China will go from boom to bust soon, because its economy is overheating and the centralized government in Beijing is unable to manage the runaway growth. The other camp believes that China will leap frog from its status of developing state to the world's largest economy and soon dethrone the US as the world's next hegemon. Neither of these extreme scenarios is likely to happen and this thesis leads me to think that truth is probably somewhere in the middle.

We cannot underestimate the enormous internal challenges that a massive country like China faces in managing the impacts of its economic growth. From that perspective, I empathise with China's leadership and its reluctance to take on legally binding commitments to limit emission increases. China's domestic energy supply is already stretched to capacity and future growth in energy demand will only complicate this situation. However, if China were to continue its heavy reliance on coal to produce most of its electricity, China will be literally 'digging' its own grave as well as that of the many populations elsewhere vulnerable to the impacts of climate change. Relying on imported oil and gas leaves China vulnerable to interruptions of supply and more importantly upward price fluctuations. There are no easy answers to China's energy conundrum and Chinese leaders' pursuit of every possible energy source – coal, oil, natural gas, nuclear energy, large hydro, renewables and biofuels – combined with major investments in energy efficiency seems to be a sensible way forward for China and its economy.

However, because of China's size, China's internal problems in balancing economic and environmental concerns do not remain limited to China alone and have global repercussions. Increased demand for oil due to more car use in China has again led to high oil prices in early 2011, even before the effects of the economic crisis have been absorbed (Rubin, 2010). Increased meat consumption in China leads to deforestation of the Amazon rainforest, as more forest is converted to agricultural land to grow soy for livestock (Barrionuevo, 2011). China's demand for bio-fuels has "[externalized] the externalities [involved in the production of biofuels] to other states by supporting its companies to reach out to essentially less developed countries without providing and enforcing transparent guidelines" (Kraus, 2009). Clearly, China's phenomenal growth and energy consumption have major repercussions far beyond its borders and not always positive ones for the rest of the world.

This is why China's traditional foreign policy stances on national sovereignty and its resistance against foreign meddling in internal affairs will become more difficult to maintain in the years to come. China's global impact will lead to demands that China becomes more engaged in international affairs. A continued reliance on G-77 rhetoric about its 'right to develop' will become increasingly untenable. Discussions about China's role in Africa, the fixed exchange rate of the Renminbi against the US dollar, China's increased military spending, and non-proliferation concerns about Iran and North-Korea will continue to prompt demands for China to be part of a global solution.

The Copenhagen climate summit illustrated this trend, where China's status as the world's largest emitter put pressure on China to commit to limit its growth in emissions. While China was able to resist this pressure, calls for China to make its emissions peak as soon as possible will only grow louder, particularly as the relative share of the EU and the US in global emissions will likely continue to decline. Chapter V demonstrated that China's insistence on the CBDR principle and historical responsibility is not just a "rhetorical action" or "the strategic use of norm-based arguments" to avoid binding emission limitations (Schimmelfennig, 2001, 48). China's insistence on the 'polluter pays' principle and the West's unsustainable modes of consumption predate its phenomenal economic growth over the last two decades. In contrast to some of the reporting in the Western media about Copenhagen (Lynas, 2009; Rapp *et alia*, 2010), China's interpretation of the CBDR principle is not just a convenient excuse for its status as the world's largest emitter. Rather, the Chinese diplomacy in Copenhagen speaks to a genuine sense of injustice. Chinese officials feel it is unfair to ask China to curb its emissions, just as its economy is taking off. China feels strongly about its sovereign right

to pursue economic growth as its main strategy of improving the living standards of the Chinese population.

What should keep us hopeful is the fact that China no longer views environmental protection as a concern for rich countries alone. As chapter VI indicated, Chinese leaders are not necessarily ideologically opposed to emission reductions, as long as reducing the carbon intensity of the Chinese economy does not inhibit its broader economic goals. However, China continues to wait for the leadership of industrialized states with their more advanced technological and regulatory expertise to demonstrate to China that emission reductions can be combined with economic growth. This is a role that the EU as a 'civilian power' has already tried to fulfil through the EU-China Partnership on climate change, but also needs to demonstrate domestically.

#### **VII.5. Contribution to political science**

By combining a Constructivist theoretical framework with a focus on the political-economic context in which actors like the EU, its Member States and China operate, this research has blurred at least some of the boundaries that animate the International Relations discipline. Sirla and Katzenstein (2010) provided an appropriate label for my approach that tries to move beyond paradigms, namely "analytical eclecticism".

*We define as eclectic any approach that seeks to extricate, translate, and selectively integrate analytic elements [...] of theories or narratives that have been defined within separate paradigms that address related aspects of substantive problems that have both scholarly and practical significance [emphasis in original] (Sirla & Katzenstein, 2010, 10).*

Rather than making the practice fit within a specific theory, such analytical eclecticism offers an opportunity to "[take] on problems as they are understood by political actors, without excessively simplifying such problems to fit the scholarly convention or theoretical boundaries established by any one tradition" (Sirla & Katzenstein, 2010, 10).

Global negotiations on the stabilization of greenhouse gas concentration levels in the atmosphere are not only a major challenge for policy-makers, but are also a challenging topic for political scientists and International Relations scholars in particular. This is why this dissertation did not limit itself to Constructivism alone, but also engaged with its critiques as well as other theoretical approaches. This has been the intent of combining the Normative Power concept with Andrew Moravcsik's Liberal Intergovernmentalism approach in Chapter III. Chapter IV combined the literature on the (external perceptions of the) EU as an international actor with a critical analysis of the EU's public policy. Chapter V mixed analyses of the CBDR principle by international lawyers with a Constructivist focus on norms. Chapter VI combined a Constructivist approach with a focus on the domestic political-economic and energy context of China. Such eclecticism results in less parsimonious explanations, but leads to a richer understanding of the complex range of interacting variables at work in international politics and climate change in particular.

In what follows, I demonstrate how my research has avoided an "imperialism of categories" (Kaztenstein, 2010, 20). Many concepts within the International Relations discipline obstruct rather than help in an analysis of global discussions on climate change, as international politics is conceptualized in dichotomous, mutually exclusive categories. Such dichotomous concepts are widespread and include the normative vs. material factors, environment vs. the economy, North vs. South, public vs. private actors and domestic vs. foreign policy.

IR scholars have been split into Rationalist vs. Constructivist paradigms about what motivates the behavior of international actors. Is international politics about the

competing agendas of utility-maximizing actors, acting out of their own self-interest? Or do other, more normative considerations also influence foreign policy-making? In the context of climate change, this begs the question whether states and other international actors like the EU will be motivated to reduce their emissions due to the international, moral pressure from other states, NGOs and scientists? For example, do arguments about the 'historical responsibility' for causing climate change find traction among policy-makers? Or do concerns about the negative long-term impacts of climate change inspire them to take effective actions today? Or do they only consider implementing comprehensive measures to tackle climate change, if they perceive such a course of action as being in their short-term economic interest? This dissertation demonstrated how material as well as normative principles motivate international actors in an area like climate change mitigation. "If 'doing the right thing' enhances one's interests, then it becomes difficult to disentangle the underlying rationale for action" (Busby, 2010, 270). Hence, drawing a clear distinction between normative vs. material motivations is a major methodological challenge. Neither Rationalism nor Constructivism can claim to provide the only correct answer. Sometimes, material and normative concerns conflict, but they can also be mutually reinforcing, as the example of a 'first mover advantage' for the EU's mitigation targets demonstrated. Only by building bridges between these separate paradigms can we fruitfully advance a research agenda about how these different motivations of international political actors coexist.

Along the same lines of the Rationalism vs. Constructivism debate is the longstanding political debate about the economy vs. the environment and particularly how these different concerns are incompatible and require a trade-off. One of the main stumbling blocks for garnering worldwide support for a global mitigation norm has been the widespread perception that reducing emissions will come at a considerable cost to the

taxpayers and the wider economy. This dichotomous choice of either prioritizing the environment or the economy has long dominated discussions about how to tackle climate change. However, since the turn of the 21<sup>st</sup> century, transitioning to a low-carbon economy is being increasingly framed not as a cost, but as an investment in the future competitiveness of a national economy in a global market. In addition, policy-makers increasingly understand that no action on climate change will also result in economic losses. This 'learning experience' is already influencing how the EU is framing the need for the EU to curb its own emissions. Similarly, even though China, recognized in the context of the UNFCCC as a developing state, does not have any legally binding mitigation targets, the Chinese leadership has made major investments in improving the energy efficiency of China's power sector and in developing a home-grown renewables energy sector. In other words, the old opposition of the environment vs. the economy is losing salience and this should be reflected in the literature as well.

From the very beginning, negotiations on multilateral environmental treaties have been dominated by the polarization between the West and the rest or between the industrialized and the developing states. This dichotomous North-South division has also become "ossified" in the global climate change regime (Desombre, 2006). However, this representation of global climate politics as two opposing monolithic blocs should not be taken for granted in the 21<sup>st</sup> century. For example, the need for industrialized states to take a lead role in reducing emissions is clearly recognized in the EU, whereas the distinction between industrialized and developing states is one of the main obstacles for the US to engage more constructively in the climate regime. Further fragmenting the binary North/South division is China's recently acquired status as the world's top emitter of GHG emissions. Moreover, China is forging ahead with major investment in energy efficiency and renewable energy and might soon overtake the advanced technological

capabilities that industrialized states have grown accustomed to. Such future developments will call into question the usefulness of the North/South categories, whereby the North provides technology transfer, capacity-building and funds to help the South. This traditional 'division of labour' is likely to become more fluid in the near future.

Yet another concept that has become blurred in recent years is the dichotomous distinction between the public, intergovernmental diplomacy and other very diverse set of private actors with civil society, corporate or scientific backgrounds. Shifting the focus from state-led diplomatic negotiations in regime theory, the concept of 'global governance' has already tried to capture the growing role of non-state actors like NGOs and epistemic communities in steering global environmental regimes. Specifically for climate change, the many corporate actors involved in the carbon markets also need to be incorporated in the analysis to research their contribution in governing the global climate change regime (Bernstein *et alia*, 2010). The EU has established the ETS as the world's largest carbon market, which not only operates within the EU but is linked to the global climate regime through two flexibility mechanisms, Joint Implementation (JI) and the Clean Development Mechanism (CDM). As a result, any assessment of the EU's climate diplomacy cannot be limited to the diplomatic steps *sensu stricto* of the EU at the multilateral and bilateral level, but needs to include an analysis of the effects of the EU's carbon market in, for instance, China.

Apart from the demands created by the ETS for international offsets outside the EU, the EU's climate policies also blur our traditional understanding of what can be understood as 'domestic' and 'foreign' policy. 'Pure' foreign policy tools such as comprehensive blueprints for international negotiations, providing climate finance, sending high-level delegations, funding specific mitigation projects or climate science can help the EU to

achieve its climate-related objectives. However, to really persuade other international actors to reduce their emissions, the EU needs to demonstrate that pursuing such environmental objectives does not jeopardize its economic fortunes (see the abovementioned 'environment vs. economy' debate). Until now, no country has managed to break the 'iron law' that a growing economy has always been and continues to be accompanied by growing emissions. While all major industrialized states as well as developing states like China have reduced the carbon intensity of their economies (International Energy Agency, 2009, 86-88), none have been able to grow their economies and simultaneously reduce their emissions. For the EU to effectively lead the world on climate change, I argue that the EU's implementation of domestic policies must 'showcase' a thriving low-carbon economy and that such domestic success is a crucial factor for both the effectiveness of the EU's foreign policy and avoiding dangerous climate change.

To conclude this section, a continued reliance on mutually exclusive, dichotomous categories stands in the way of improving our understanding of developments in the climate change regime broadly defined. This thesis demonstrated the value-added of greater analytical eclecticism. Rather than trying to 'fill a gap in the literature', this research started from the intellectual puzzle of the EU's lonely existence as a global climate leader. Constructivism was chosen as the overarching theoretical guide, but also engaged with the critiques of Constructivism from scholars with a different theoretical background. This meant that more attention was paid to the political-economic context that provides the background for norm negotiations and the importance of domestic political structures than in earlier Constructivist research. This research resulted in a "middle-range causal account incorporating complex interactions among multiple mechanisms and logics drawn from more than one paradigm" (Sil & Katzenstein, 2010,

19). The empirical findings presented inform both academic as well as ongoing policy debates.

### **VII.6. Future research for the discipline of Global Environmental Politics**

While China's emphasis on economic growth makes sense domestically, hard questions loom ahead: Is it at all possible to have 1 billion Chinese people driving cars, take flights to go on holiday, eating meat on a regular basis, and so on? With a 10% growth rate per year, China's economy is doubling every seven years. That means the size of its economy will be four times as big in fourteen years, in 21 years eight times as large. Is it possible for the current second-largest economy to grow almost ten times in size over the course of one generation? This begs the question posed by many environmentalists about 'limits to growth', as originally proposed by the Club of Rome in 1972.<sup>122</sup>

This thesis explored how increasingly popular phrases such as 'green growth' and the 'business opportunity of climate change' interact with a global mitigation norm. These concepts indicate a growing interest in the economic benefits of more environmentally friendly technologies, which fit in an environmental discourse of 'ecological modernization' (Dryzek, 2005, 164-179), defined as "a restructuring of the capitalist political economy along more environmentally sound lines". According to Dryzek (2005, 170), "limits [to growth] are not so much denied as ignored", because "the idea of limits becomes fuzzier once economic growth is decoupled from growth in environmental stress". Proponents of ecological modernisation advocate to 'do more with less' by improving the efficiency of firms and as a result the overall economy. This requires for

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<sup>122</sup> The debate about 'limits to growth' continues to inform new research. Researchers at the Stockholm Resiliency Centre developed the notion of "planetary boundaries" that lay out the "safe operating space for humanity" within a finite planet (Rockstrom et alia, 2009).

instance a re-organisation of the structure of the economy in way that negative environmental externalities, such as greenhouse gas emissions, are internalized in the accounts of businesses by putting a price on carbon emissions. The Stern review is also a classic example of ecological modernisation, because it advocates that action to reduce emissions today will cost less than dealing with the long term effects of unmitigated climate change. In other words, action now is more economically efficient than action later. However, the ecological modernisation discourse fails to take into account that climate change is only one of the symptoms of a larger environmental crisis that humanity is facing.

This thesis focused on the politics of the EU's Climate and Energy Package and diplomatic discussions on climate change in multilateral and bilateral settings. By focusing on the proliferation of international environmental agreements, this thesis did not address the criticism that “while *environmentalism* [the array of institutions and attention paid to environment] may be doing well, the *environment* is not [emphasis in original]” and that International Relations scholars need to recognize that “there is a disconnect between concern and policy on behalf of the environment, on the one hand, and the biophysical quality of the earth's ecosystem, on the other” (Wapner, 2003, 6). Since 1992, the UNFCCC summits make this abundantly clear, as they have completely failed to stop global emissions from rising.

While research of International Relations scholars have generated interesting findings about how international environmental agreements are negotiated and implemented,

new research should be focused more on the *effectiveness*<sup>123</sup> of international environmental agreements or rather on why international agreements are so ineffective. International Relations scholars should shift their focus from an analysis of “the ways in which states and international organizations have responded to the impact of environmental change” to “a thorough analysis of *causes* and of the *diffused* processes which engender environmental change [...]” (Saurin, 1996, 97 quoted in Vogler, 2005, 235 [emphasis in original]). In his recent article on “The Problem of Consumption”, Dauvergne (2010, 8) points to capitalism as the root cause of our environmental challenges. I concur with his view on how attempts to produce a greener form of capitalism fail to address

a problematic capitalist world order built on ever-expanding economic growth, consumption, and markets, and efficiencies and profits realized by distancing and externalizing the environmental and social costs of producing, using, and replacing consumer goods.

For Dauvergne (2010, 8), this will “require going beyond the assumptions, pathways, and measurements of an ecological modernization approach”. The EU’s moderate emission reduction ambitions, or China’s drive for greater efficiency are examples of a response to the climate crisis, which underestimates significantly the broader ecological challenges before us.

With regard to climate change, International Relations Scholars and the sub-discipline of Global Environmental Politics have mainly concentrated on the diplomatic inputs into the UNFCCC process. Most work by International Relations scholars – this thesis included – on the EU’s climate policies have focused their analysis on the politics behind the EU’s leadership on climate change and the negotiation process within the UNFCCC. These

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<sup>123</sup> Effectiveness is different from compliance. The Kyoto Protocol can illustrate this point. Even if all industrialized states had *complied* with their joint target of reducing their emissions by 5.2%, compared to 1990 levels, the *effectiveness* of Protocol in preventing future climate change remains in doubt, particularly as IPCC reports have since called for much deeper emission cuts.

analyses have generated many interesting insights in the institutional interplay in Brussels that generated the EU's Climate and Energy Package or the diplomacy behind the Copenhagen Accord. However, this research typically stops at such specific *policy output* and misses a more detailed analysis of how the EU actually plans to achieve these policy objectives, i.e. the *environmental output*.

In contrast, scholarly work by environmental and energy economists on the same issues have focused on the effectiveness as well as the economic impacts of the EU's energy policies to achieve its emissions reduction targets (Blanco & Rodrigues, 2008; Boehringer *et alia*, 2009). What is missing from this literature is a more detailed questioning of why the EU chose these policies or targets and not others. For example, the energy-focused literature analyses the contribution of a specific energy source to the EU's overall climate-related targets, without questioning the decision-making behind the EU's promotion of nuclear energy. Ideally, these two disciplines of Global Environmental Politics and energy/environmental economists would interact more to give a fuller picture of the decision-making as well as the environmental effectiveness of the decisions taken. By focusing on the question 'how' the EU has promoted a global mitigation norm, rather than on the more usual question 'why', my research engaged with some of the publications that question the effectiveness of current energy and climate policies. For example, this thesis highlighted how the ETS, the cornerstone of the EU's climate policies, has not actually reduced European emissions. In my view, the most interesting work published in this area, which provides novel insights into such matters, does not originate from academics *pur sang*, but from people who combine a diverse set of backgrounds that include policy-makers, environmental activists, think tanks and academics.

In the book *Heat. How to Stop the Planet from Burning*, George Monbiot (2007) does not only limit his analysis to why ambitious action on climate change has been delayed for years. Monbiot also outlines practical steps to cut emissions in the UK by 90% in the next 20 years with existing technologies and targeted investments in housing stock, public transport and changes in how we shop and how we produce and distribute energy. Monbiot also points out the flaws in the approaches advocated by 'ecological modernizers': For example, improving energy efficiency neglects the Khazzoom-Brookes Postulate, which suggests – rather counter-intuitively – that energy use increases at the macro-economic level as a result of improved efficiency. Monbiot (2007, 62) gives the example of how increasingly fuel-efficient car engines lead manufacturers to produce bigger cars with new features like air-conditioning that result in the same or even higher level energy consumption.

Other interesting work has been done by Terry Tamminen in his book *Lives Per Gallon: The True Cost of Our Oil Addiction*, which includes a full-cost accounting of the true cost of fossil fuels in the US and estimates the value of all subsidies and costs related to the fossil fuel industry at over US \$ 1 trillion. Richard Heinberg (2005, 2009, 2010) has also done groundbreaking work in thinking about 'real' sustainability, particularly by charting how to reduce our reliance on non-renewable resources like fossil fuels. In his book *Crimes Against Nature*, Robert F. Kennedy Jr. (2004) has detailed the close ties between the George W. Bush administration and the fossil fuel lobby, identifying the role played by entrenched corporate interests in the energy sector. In *Prosperity without Growth*, Tim Jackson thinks about how we can decouple our economic activities from their environmental impact, which will require that "the carbon intensity of every dollar of output will be 130 times lower in 2050 than it is today" (Jackson, 2009, 187).

Carbon markets are attracting more and more investments, but scholars from the International Relations discipline have largely missed the boat in questioning their environmental integrity: Do carbon markets like the ETS actually help to reduce emissions and shift the world economy in a low-carbon direction? Reports from NGOs like Sandbag, CDM Watch and the Environmental Investigation Agency have published the most compelling and in-depth analyses about the concrete implications of the ETS. Michael Wara (2007), a lawyer at Stanford Law School, exposed the abuse of HFC-23 CDM projects. His work was published in a journal like *Nature*, not in any of the renowned journals of the Global Environmental Politics sub-discipline.

Calls for more interdisciplinary research have been 'en vogue' for a while. These above-mentioned examples demonstrate how inter-disciplinary research on the 'the problem of consumption', particularly the consumption of fossil fuels, can develop new understandings of the climate challenge and possible 'solutions'. However, this will require International Relations scholars like myself to move beyond their comfortable focus on intergovernmental negotiations and engage with engineers, economists, climate scientists, biologists, etc.

### **VII.7. Policy recommendations**

Without stopping climate change – 'the mother of all environmental problems' – there is little chance of dealing with other environmental problems such as endangered species, bio-diversity, air and water pollution or desertification. Radically lowering emissions might not solve all problems, but will definitely give a big push. The EU has made some progress in dealing with climate change, but the effectiveness of some of its choices can

be questioned. Here, I wish to briefly address the EU's choice of a cap-and trade-system, its investments in CCS and the future of renewable energy.

The ETS may be the cornerstone of the EU's climate policies, but it has not been effective in driving down emissions. Theoretically, a carbon market seeks the most efficient emission reductions, i.e. at the lowest cost. However, because it is so difficult to reach consensus among EU Member States, the resulting compromises have watered down the effectiveness of the ETS as an emissions reduction instrument. As outlined throughout, the ETS became virtually toothless due to EU's heavy reliance on offsets, their questionable environmental integrity, the 'hot air' emissions trading, the delayed auctioning of permits in the ETS in the third commitments, free allocation of permits for carbon-intensive industries at risk of carbon leakage, the over-supply of permits due to the current economic recession and so on. These many exemptions have contributed to low carbon prices, which are in fact too low to spur greater efficiency or a transition to low-carbon energy sources. To paraphrase Buchan (2010), the EU and its carbon market activities are treading water rather than making headway.

Despite some excellent work by environmental NGOs like Sandbag, there is little public scrutiny of these carbon markets and how they function. A story about how HFC-23 projects game the CDM system is too complex for mainstream media, because there is little prior knowledge among the general public about carbon markets. Apart from the lack of transparency, carbon markets were also sold as a way to allow flexibility to industry rather than impose government regulations on how to reduce emissions. This would supposedly lead to the most cost-effective way to reduce emissions. However, the idea that carbon markets take government involvement out of the equation has been proven wrong time and time again. Maybe the most blatant example is how national

governments over-allocated permits to their national industries in the first phase of the ETS, which led to the complete collapse of the price of ETS permits. The new regulations proposed by the European Commission to ban Clean Development Mechanism projects that involve industrial gases like HFC-23 and the allocation of a “bonanza” of free permits to some industries (and not others) are more examples of the constant need for intervention by public authorities (see Euractiv, 2010i).

For all these reasons, many environmentalists as well economists believe that a straightforward carbon tax provides a better alternative due to its cost-efficiency and environmental effectiveness and equity.<sup>124</sup> I agree with this view that a carbon tax is preferable, as it allows governments to initially set the carbon price low and then gradually ramp up the price, giving a clear price signal to industry without the confusing price volatility at work in the ETS. This is not only transparent and easier to administer, but the revenues from such a carbon tax flow back to the public coffers. These extra revenues can either be used to cut other taxes like income taxes or can be invested in promoting the Research and Development or the deployment of energy efficiency and low-carbon energy initiatives.<sup>125</sup> The American Energy Innovation Council, which brings together American business leaders like Bill Gates, has suggested more than tripling the current US research budget on energy to a yearly budget of US \$16 billion for research on low carbon energy technologies. This could be funded with a negligible tax increase

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<sup>124</sup> For an overview of the arguments in favour of a carbon tax and its design, see Lachapelle, 2010.

<sup>125</sup> Proponents of a cap-and-trade system to deal with greenhouse gas emissions argue that a carbon tax fails to impose an actual cap on emissions and that market forces will help to reduce emissions in the most cost-efficient way possible. In addition, carbon taxes can be a very regressive form of taxation, as low-income families spend a higher percentage of their income on energy-related expenditures. However, this is not necessarily the case, as the unequal distributional impact of a carbon tax can be offset by other measures (e.g. subsidies to better insulate houses, etc.). Finally, it is important to mention that elements of a carbon tax can also be integrated in a cap-and-trade system by auctioning emission permits, enabling governments to raise revenue, and by imposing a floor price for emission rights.

that represents “just 1.5 percent of U.S. energy sales” (American Energy Innovation Council, 2010). A boost for research funding could lead to major technological breakthroughs, to solve for instance the problem of the intermittency of renewable energy sources like wind and solar or develop a new generation of batteries for electric cars.

Secondly, low carbon energy is a broad term that encompasses many different sources of energy like ‘clean coal’ with CCS technology, bio-fuels and renewable energy sources. In both the US and the EU, CCS has achieved a quick surge of interest from policy-makers and has already received considerable public funds for Research and Development as well as demonstration projects. As already outlined in Chapter VI, the feasibility of and the risks involved in the large-scale deployment of ‘clean coal’ technologies remains largely uncertain. The EU has promoted CCS in China through demonstration projects. While China is heavily investing in improving the efficiency of its coal-fired power plants, the installation of CCS in these plants will likely decrease efficiency by about 20-30% (Morse et alia, 2009, 2). In other words, implementing CCS will likely reduce the impact of China’s energy efficiency measures to zero. Given that China’s coal supply is already stretched and that major financial and technological challenges remain, I am sceptical about the potential of CCS. Burning more coal to implement CCS in order to tackle climate change is counter-intuitive, to put it mildly.

Instead, leap-frogging to a different energy system would be a better way to reduce emissions. While there are no silver bullet solutions to the climate crisis, a rapid and massive deployment of renewable energy holds the key to resolving many contemporary energy-related challenges as well as at least part of the ‘solution’ to climate change. A quick shift to an exclusive reliance on renewable energy remains a technological

challenge, but is no longer unthinkable in the context of continuously high prices for other fuels. This is the drama of the climate debate and the personal frustration of many activists on climate change, namely that the current state of technology of renewable resources in combination with some investments in energy efficiency can already realize dramatically reduced emissions *today*. The solutions are here, public opinion is receptive to the idea, but the political debates lag behind. Combining the growth of consumption and the protection of the environment is not sustainable over longer periods in areas like food production, transport and other natural non-renewable resources.<sup>126</sup> However, renewable energy sources could make the vision of combining increased energy consumption and reduced environmental impacts a reality.

When it comes to our energy needs however, some renewable resources have great potential to be sustainable in the long term. These renewable energy resources offer a whole range of advantages. For instance, they are not at risk of being depleted, ever. They provide energy security, because the supply of wind, sunrays and the tides cannot be cut off. When decommissioned, waste will be easy to deal with, compared to nuclear power. Using more renewable energy will mean that the health costs associated with the burning of fossil fuels will decrease. Many technological challenges must be overcome to make these renewable energy sources a reality. Dealing with these challenges will require major investments, which will generate some green jobs and moves us out of the current great recession. In combination with a drive for greater energy efficiency, the vision of a low-carbon economy can become a reality.

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<sup>126</sup> Ongoing population growth is another sustainability challenge. However, I believe this is a problem of second order, as major population growth takes place among the poorer segments of the population in Africa and the Middle East. Their contribution to the major environmental challenges that the world faces today is insignificant, compared to the large environmental and carbon footprint of Western populations.

In my own future research, I would like to look at the political economy of renewable energy sources. Given their potential, I want to address why they do not play a larger role. For example, the EU plans to 'only' double the share of renewable energy sources by 2020. Why not more? Several authors have detailed such an "energy revolution" and how a combination of improved energy efficiency and a shift to renewable energy can lead to a zero-emissions energy mix (Flannery, 2005; Monbiot, 2006; Tickell, 2008; Friedman, 2009, Homer-Dixon & Garrison, 2010; Greenpeace & European Renewable Energy Council, 2010; World Wildlife Fund, 2011). This is no longer the remit of environmentalists, but 'big business' is also waking up to this opportunity.

However, renewable energy is not the only form of low-carbon energy and competes with other forms of low-carbon energy, which also have important political backers. Nuclear energy already supplies a considerable part of Europe's energy needs. Despite increasing doubts about its environmental integrity and impact on food prices, bio-fuels such palm oil or corn-based ethanol also fall under the category of low-carbon energy (Mitchell, 2008). Last but not least, there is the promise of CCS technology to deliver 'clean coal'. A major political struggle looms ahead over which of these low carbon energy source offers the best value for money, energy security, safety. Despite the well-established 'old' energy industries such as coal and nuclear, renewable energy has great potential, if this 'new' energy sector plays its cards wisely. To paraphrase Robert F. Kennedy Jr. (The Solar Industry, 2009), there is a bright future ahead and it comes from the sun and the wind and the waves.



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## **Appendix I: Overview of the science of climate change**

Countless are the times that climate change has been described as ‘the greatest threat to humanity’, whose severe impacts will require immediate action. Our improved understanding of the potential impacts of climate change like rising sea levels, more hurricanes, increased desertification, flash floods, declining crop yields, acidification of the oceans and so on lead to a . While the future impacts of climate change are well understood, our scientific understanding of what causes climate change is even better. In the words of the Intergovernmental Panel on Climate Change (2007, 5), “[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic [man-made] GHG concentrations”. The greatest contribution to such man-made emissions – about 60% – comes from our use of fossil fuels to produce energy for electricity, heating and cooling, transport, etc. It is clear that most of our daily activities – switching on lights, heating houses, driving to work – involve in fossil fuels such as coal, oil and gas.

Apart from a clear understanding of the causes and likely impacts of climate change, there is also a scientific consensus on the extent to which emissions need to be reduced to avoid the worst impacts of climate change. GHG concentrations in the atmosphere increased from pre-industrial levels of about 280ppm CO<sub>2</sub> eq. around 1750 to about 390ppm CO<sub>2</sub> eq. today, which corresponds to an increase in average global temperatures of about 0.74 degrees Celsius (IPCC, 2007, 2). There is now widespread agreement that any further increase beyond 2 degrees Celsius (about 1.3 degrees Celsius from today) would exceed a critical threshold. Staying within the 2 degrees Celsius range could enable “many of the worst projected ecosystems responses [to be] avoided” (Weaver, 2008, 231; Flannery, 2006, 169). In order to have a more than 60% of

achieving the 2°C target, Meinshausen, (2006 [in Schnellhuber, 2006]) demonstrated that GHG concentrations in the atmosphere need to be stabilized at 450 ppm CO<sub>2</sub>-eq. or below. What level of emission reductions is required to achieve the stabilization target of 450ppm CO<sub>2</sub> eq.? The Fourth Assessment report of the Intergovernmental Panel on Climate Change (2007, 775-776) states that industrialized states as a group would need to reduce their emissions to below 1990 levels in 2020 on the order of –25% to 40% below 1990 levels and to 80% to 95% below 1990 levels by 2050. Such a complete decarbonization of advanced industrialized economies would need to happen, even if developing countries with emerging economies in Asia, Latin America and the Middle East substantially deviate from baseline scenarios about their future emissions.

However, the Intergovernmental Panel on Climate Change failed to set a specific emission reduction target for developing states as a group to clarify what such a “substantial deviation” would require. Figures from the IEA (2009, 56-58) show that the major increases in emissions over the last 20 years occurred in emerging economies like China, India and Brazil, by 153.2%, 129.1% and 72.1% respectively. Chinese emissions increased from 2.405 to almost 7.000 million tonnes of CO<sub>2</sub>, while emissions from OECD states increased ‘only’ by 17.4% (with major variations between them). China became the world’s largest emitter of CO<sub>2</sub> in 2007 (Netherlands Environmental Assessment Agency, 2007). According to Raupach (2007, 10292), developing countries as a group “accounted for 73% of global emissions growth in 2004”. The rapid emission growth means that it is essential to also specify a target to limit emission increases from developing states. Analyzing different models, a study by van Elzen and Hoehne (2008) found that “emissions of non-Annex I countries as a group have to be below the baseline roughly between 15% to 30% for 450 ppm CO<sub>2</sub>-eq [...] in 2020”.

**Table 1: Box 13.7: The range of the difference between emissions in 1990 and emission allowances in 2020/2050 for various GHG concentration levels for Annex I and non-Annex I countries as a group (IPCC, 2007a, 776).**

Scenario category	Region	2020	2050
A-450 ppm CO <sub>2</sub> -eq	Annex I	-25% to -40%	-80% to -95%
	Non-Annex I	Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia	Substantial deviation from baseline in all regions
B-550 ppm CO <sub>2</sub> -eq	Annex I	-10% to -30%	-40% to -90%
	Non-Annex I	Deviation from baseline in Latin America and Middle East, East Asia	Deviation from baseline in most regions, especially in Latin America and Middle East
C-650 ppm CO <sub>2</sub> -eq	Annex I	0% to -25%	-30% to -80%
	Non-Annex I	Baseline	Deviation from baseline in Latin America and Middle East, East Asia

This table shows that dealing effectively with climate change will require action on two 'fronts': Significant reductions in emissions from industrialized states as well as limitations in future emissions increases in developing countries. Early emission reductions in the next decade are of the essence, as "climate change that takes place due to increases in carbon dioxide concentration is largely irreversible for 1,000 years after emissions stop" (Solomon *et alia*, 2009, 1704). Clearly, urgent action is needed, as steeper mitigation targets for the period after 2020 will be less effective. This is why global emissions, including emissions from developing countries, will need to peak by 2015-2020 and rapidly decline afterwards in order to achieve a stabilization of GHG concentrations around 450ppm CO<sub>2</sub> eq. (IPCC, 2007, 19).

**Appendix II: Overview of the Annex I group of industrialized states and their commitments under the Kyoto Protocol**

<b>Party</b>	<b>Quantified emission limitation or reduction commitment (percentage of base year or period)</b>
Australia	108
Austria	92
Belgium	92
Bulgaria*	92
Canada	94
Croatia*	95
Czech Republic*	92
Denmark	92
Estonia*	92
European Community	92
Finland	92
France	92
Germany	92
Greece	92
Hungary*	94
Iceland	110
Ireland	92
Italy	92
Japan	94
Latvia*	92
Liechtenstein	92
Lithuania*	92
Luxembourg	92
Monaco	92
Netherlands	92
New Zealand	100
Norway	101
Poland*	94
Portugal	92
Romania*	92
Russian Federation*	100
Slovakia*	92
Slovenia*	92
Spain	92
Sweden	92
Switzerland	92
Ukraine*	100
United Kingdom of Great Britain and Northern Ireland	92
United States of America**	93

\* Countries that are undergoing the process of transition to a market economy.

\*\* The United States did not ratify the Kyoto Protocol and has no binding emission limitations as a result.

## **Appendix III: Research Methods Appendix**

### **1. Methodology**

Pouliot (2007, 359) has outlined a 'subjectivist' methodology for Constructivist research, which combines "not only objectified (or experience-distant) but also subjective (experience-near) knowledge about social and international life". For Pouliot, this implies an inductive, interpretive and historical methodology for Constructivist research, which has also guided the research for this dissertation. Induction refers to the need for constructivists to move away from a priori assumptions about actor's motivations and interests. Rather, an inductive methodology requires an engagement with "agents' take-for-granted realities". While I agree with Pouliot's emphasis on the usefulness of induction as opposed to rationalist assumptions that guide deductive methodologies, an inductive methodology fails to fully acknowledge how an initial research design can steer research questions to explore certain specific hypotheses and not other ones. It is Finnemore's (2004, 13) suggestion to follow "abduction" as a research methodology that has shaped the research process of this thesis:

Abduction is neither deduction nor induction but a dialectical combination of the two. In each case, I present deductively derived hypotheses that shape the initial design of the inquiry but prove insufficient to explain events. Consequently I supplement the deductive arguments with inductively derived insights, moving back and forth between the two to produce an account that will be "verisimilar and believable to others looking at the same events" (Ruggie, 1998a, 94).

The chapters in this thesis are the final products of such an abductive research process.

It was impossible to represent this constant move between induction and deduction in the thesis itself.

The 'local' realities that were found through an abductive process are insufficient on their own, as they require both interpretation and historicization. Interpretation helps to

objectify subjective meaning as part of an intersubjective context “by relating the parts in terms of the whole and reciprocally” (Pouliot, 2007, 366). Weber proposed the analytical method of *Verstehen* or Understanding “to uncover the social meanings and significance” of human actions, which requires social science researchers “to discern a ‘direct’ and ‘emphatic’ understanding of whatever act is being performed from the vantage point of the actor” (Ruggie, 1998b, 859-860).

Once these objectified subjective meanings are uncovered, they need to become part of a narrative, i.e. “a dynamic account that tells the story of a variety of historical processes as they unfold over time” (Pouliot, 2007, 367). The goal of such a ‘narrative explanatory protocol’ is “to establish links between [social actions or events] and concrete antecedents that most plausibly had causal relevance within the social collectivity at hand” (Ruggie, 1998b, 861). In other words, constructivism and its historical methodology is not about explaining causality, but rather to “trace contingent practices that have historically made a given social fact possible’ (Pouliot, 2007, 367).

The research process for this thesis followed this three-step ‘subjectivist’ methodology. In a first step, this dissertation tried to “[recover] as faithfully as possible the meanings that [subjective] agents attribute to their reality” (Pouliot, 2007, 369). Participant observation or other methods that are frequently used in sociology or anthropology are not available to study the decision-making in the EU on climate change. Meetings of the Council working groups or the college of Commissioners are held behind closed doors and the minutes of these meetings are not available to the public. Only the final conclusions are communicated. The best available method to recover the subjective meanings of European policy is the qualitative interview with individual policy-makers. Interview protocols were designed to evaluate the role of a global mitigation norm in the

EU's leadership on climate change as well as to probe what diplomatic strategy the EU pursues to persuade a major emitter like China to commit to ambitious mitigation policies. Constructivists share an interest in normative ideas, but it should be noted that ideas in and of themselves lack agency. Their influence only works through the beliefs and actions of policy-makers. Distinguishing between 'normative motivations' on the one hand and 'interests' on the other hand as the one and only independent variable for a specific policy is a methodological challenge. Drawing a clear distinction between them is problematic, as policy-makers can deceive the researcher by claiming noble motivations instead of e.g. special interest pressure. Or policy-makers can be self-deceptive about how dominant ideas in the polity in which they operate have influenced their positions. In other words, "there is an interaction between normative beliefs and perceptions of self-interest [...]", which makes pinpointing the causal effect of ideas on the policy process more difficult (Raymond, 2009, 6-7).

As a second step, these subjective meanings were objectified "by putting them in their wider intersubjective context" in order to "understand bits of intersubjectivity in terms of a larger whole" (Pouliot, 2007, 370). This was mainly done through a discursive analysis. Discourse analysis comes in many guises, but is generally geared towards enabling a researcher "[to] capture the creation of meanings and accompanying processes of communication" (Klotz & Lynch, 2007, 19). In this thesis, discourse analysis of interviews or speeches is mainly used to situate the selected texts in their wider intersubjective context by "[f]ocusing on consistencies in assumptions within decision-making processes – evident in discourses [...]" (Klotz, 1995, 33). By identifying the shared assumptions underlying recent changes in the prevalent political discourse on climate change, particularly how to balance reduced emissions with economic growth or the 'first-mover-advantage' of the EU's climate leadership, such a discourse analysis can help identify

the link between a global mitigation norm, on the one hand, and policy actions on climate change, on the other. This discursive analysis of interviews, policy documents and speeches were triangulated against each other and against data from EU policy documents and elite publications such as the specialist press coverage of climate-related policy developments. By ensuring that the data are collected from multiple sources and checked against each other, triangulation can help increase the robustness of the findings.

A third step set these objectified meanings in motion by adding a time and place dimension to my data in order to reveal the dynamics of the decision-making process. This is done through a historical analysis, “especially the contestation that surrounds any form of knowledge that makes claims to reality” (Pouliot, 2007, 372). This focus on the past, present and future of the discourses identified helps to develop an explanatory narrative. Such a explanatory narrative traces the influence of a norm on the policy process and analyses the politics behind a specific decision such as the EU’s ‘leadership’ or “the types of normative ideas that appear on both sides of a policy debate, and to assess the ideas’ relative influence” (Raymond, 2009, 14). This explanatory narrative protocol is not aimed at developing a causal theory of ‘how X causes Y’ in a search of the necessary and sufficient conditions under which ‘X *always* causes Y’. Such explanations are based on the assumption that “cause and effect are independently existing phenomena” (Fearon & Wendt, 2002, 64). Rather, Constructivism attempts to develop a ‘constitutive analysis’ of how social facts come into being, “informed by a processual (instead of correlational) understanding of causality” focusing “on chains of cause-effect relations” (Pouliot, 2007, 373). Such constitutive analyses can help our understanding of how cause and effect are mutually constituted. This goes back to the difference between causal and constitutive theories and their focus on different

dependent variables. Causal theories explain the causes for a specific behaviour (e.g. a foreign policy decision). Constitutive theories like Constructivism focus on the cause of a preference (e.g. a shared understanding of what constitutes an acceptable foreign policy practice). However, a clear distinction between actions and preferences may be impossible, because of “a potentially endless means-ends chain in which any given end can be seen as a means to some other ends” (Fearon and Wendt, 2002, 64). This is also the reason why this dissertation did not try pin down whether or not European policy-makers ‘really’ internalized a global mitigation norm. Instead, I focused on the shared assumptions of policy makers about the need to reduce emissions, as reflected in the prevalent political discourses, which enabled this thesis to link specific *policies* on climate change in the EU and China to a global mitigation norm. In doing so, I was able to “[avoid] the trouble that potentially bedevils much research where it is difficult to discern if decision-makers are embracing the norm or acting for other reasons” (Busby, 2010, 36-37).

## **2. Case selection**

The main method used to answer the question whether and how the EU has promoted a global mitigation norm is a case study of the interactions between the EU and China on climate change. For the purpose of this dissertation, I used George and Bennett’s (2004, 5) definition of a case study as “the detailed examination of an aspect of a historical episode to develop or test historical explanations that may be generalisable to other events”. I chose the case study method, because it can “accommodate complex causal relations such as equifinality, complex interactions effects and path dependency” (George and Bennett, 2004, 22). While this method’s ability is limited in producing broad generalisations, the case study was the best method available to explore the complex

interactions on mitigation targets within the EU, the external perceptions of the EU's leadership on climate change and the quickly maturing interactions between the EU and China on climate and energy-related topics. Because case studies can deal with complexity, the case study method “remains stronger at assessing *whether* and *how* a variable mattered to the outcome than at assessing *how much* it mattered” compared to other variables [emphasis in original]” (George & Bennet, 2004, 25)

Like other methods, case studies have drawbacks, in particular the risk of a ‘selection bias’. Researchers can make the mistake of selecting a set of cases, which all share the same dependent variable. For example, most Constructivist research has focused on the successful diffusion of global norms, which leaves the question of how some norm diffusion is successful, while other norms fail to gain traction, unanswered.<sup>127</sup> This dissertation has avoided the ‘trap’ of selection bias by mainly concentrating on the ‘critical case’ of the interactions between EU and China on climate change. Flyvbjerg (2006, 231-232) identifies ‘critical cases’ as those cases that enable scholars to formulate a generalization of the sort, “If it is valid for this case, it is valid for all (or many) cases.” Or in its negative form, “If it is not valid for this case, then it is not valid for any (or only few) cases”. In his view, “no universal methodological principles exist by which one can with certainty identify a critical case. The only general advice that can be given is that when looking for critical cases, it is a good idea to look for either “most likely” or “least likely” cases, that is, cases likely to either clearly confirm or irrefutably falsify propositions and hypotheses. I contend that the EU's efforts to persuade China to take on mitigation targets constitutes a ‘least likely’ case for three reasons.

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<sup>127</sup> I explored this example in greater detail at the end of section II.2.

First of all, China has traditionally emphasized economic growth over environmental protection, which limits the potential of a high degree of 'cultural match' between the mitigation norms promoted by the EU and China's domestic policy. Secondly, China's foreign policy has emphasized, since the very origins of the People's Republic, the 'five principles of peaceful coexistence' defined as mutual respect for sovereignty and territorial integrity, mutual non-aggression, mutual non-interference in each other's internal affairs, equality and mutual benefit, and peaceful coexistence. Refraining from interference in the domestic affairs of other countries is a cornerstone of Chinese foreign and a principle that Chinese leaders expect other countries to respect, in particular with regard to sensitive issues like energy (Zaborawski, 2006, 65 & 79; Lanteigne, 2009, 24). Thirdly, China joined the efforts of the G-77 alliance of developing countries to resist any external limitations on their right to develop their economies in previous negotiations on the Rio Convention and the Kyoto Protocol. With regard to the negotiations on a post-2012 follow-up to the Kyoto Protocol, China repeatedly emphasizes the principle already enshrined in the Protocol of 'common but differentiated responsibilities', which sets quantified emission reduction targets for developed countries (Annex I-countries), but not for developing countries. This "least likely" case study helps to verify and build on existing Constructivist research on norms, giving us extra empirical material to assess the cross-cutting issues that determine the EU's leadership on climate change.

### **3. Research methods and information sources**

Hopf (1998, 198) points out that Constructivism as a "theory of process and commitment to interpretivist thick description places extraordinary demands on the researcher to gather mountains of elaborate empirical data". My thesis relies on a wide range of empirical research material that was gathered between October 2008 and December

2010.

The research process started with a review of the existing literature in the field. I particularly relied on publications in academic journals such as *International Organization*, *International Environmental Agreements*, *Global Environmental Politics*, *Journal of Common Market Studies*, *Journal of European Public Policy*, *Review of International Studies*, *Millennium*, *Cooperation and Conflict* and so on. Overviews of the *Global Environmental Politics* literature, such as Dauvergne (2005), were also instrumental in the early research stages.

Subsequently, my research shifted to an exploration of ambitions and motivations, contained in EU policy documents and legislation on climate and energy questions. The timeframe for the selected documents started from the publication of the European Commission (2007) communication *Limiting Global Climate Change to 2 degrees Celsius. The way ahead for 2020 and beyond* in January 2007, which proposed a unilateral 20% target and a conditional 30% target. The deadline for documents that were considered, was December 2010. This included the approval by the Council and European Parliament of the Climate and Energy package in December 2008. A last string of European Commission Communications and Council conclusions, included in the analysis, is the post-Copenhagen evaluation by the Commission and the conclusions from debates in the Council and the European Parliament about moving the EU's unilateral target from 20% to 30% following the steep decline in the EU's emissions during the economic crisis in 2008-2009 (e.g. European Commission, 2010d).

Thirdly, I conducted 22 interviews with policy-makers in Brussels during January 2010. All major stakeholders in the EU's climate and energy policies were represented:

Member State and Commission officials, UNFCCC officials, missions of non-EU Member States to the EU as well as policy officers of environmental NGOs and industry.<sup>128</sup> Interviews usually lasted just under one hour and were mainly conducted in the interviewee's office. I adopted a semi-structured format for these interviews.<sup>129</sup> By using a predetermined set of questions, I ensured that the same general information was collected during each interview, while still permitting me to tailor the actual interview to the interviewee's priorities. These interviews were intended to verify that my reading of the official documents was correct and to probe into matters that were not directly addressed in official sources.

Fourthly, I attended the Copenhagen summit as a delegate of a Canadian environmental NGO, the Sierra Club of Canada. During the conference, I posted frequent updates to Sierra Club blog: <http://www.sierraclub.ca/witnesscopenhagen/>. While my presence at the conference does not qualify as 'participant observation', it did give me insider access to a great deal of otherwise inaccessible information. For example, I was able to attend several press conferences held by the Chinese negotiators. As an NGO delegate, I was also able to attend the daily meetings of groups of NGOs such as the Canadian Climate Action Network and the International Climate Action Network, where much information was shared about progress in the negotiations.

Apart from my own observation and analysis, I also used the media as a fifth source of information. Two traditional media sources were particularly useful because of their excellent coverage of environmental issues: *The Guardian* and *The New York Times*.

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<sup>128</sup> The only major stakeholder missing from this sample is the European Parliament and its members. I contacted several Members of the European Parliament of different fractions, but none were available to meet.

<sup>129</sup> See interview protocols in Appendix V

*The Guardian* has excellent coverage of environmental issues and climate change in particular and sends experienced journalists like John Vidal to the meetings of the UNFCCC. *The New York Times* also has extensive coverage of environmental issues (e.g. “Green. A Blog about Energy and the Environment”) and sometimes sends some of its senior reporters like Andrew Revkin to UNFCCC meetings. To follow how the Chinese media reports on issues related to climate change and low-carbon energy, I followed the People’s Daily website in English. This is a state-run media outlet and is a reliable source of information for the views of the Chinese government on a range of issues. During the Copenhagen conference, I followed a wider international press, such as *Le Monde* (France), *Frankfurter Allgemeine Zeitung* (Germany) and also Canadian media sources such as the *Globe & Mail* and the *Edmonton Journal*.

A sixth source of information was the specialized press on climate and energy issues and EU policy. Point Carbon is a consultancy firm specialized in the analysis of power and carbon markets, and publishes, for example, *Carbon Market News* and *Carbon Market North America*. These publications are a great source for carbon market and energy-related news. The *Euractiv* website was instrumental in following recent EU-level policy developments on energy and environment. Other sources of specialized reports were the publications by American environmental NGOs, which provided detailed coverage of recent developments in China’s low-carbon energy and climate policies. American civil society organisations such as the Energy Foundation, the Natural Resources Defence Council, the World Resources Institute and the Pew Center on Global Climate Change have stepped up their own ‘diplomacy’ and dedicated significant resources to climate-related work on China, out of concern about environmental pollution in China, but also because any meaningful political action on climate change in the US depends on similar actions in China. Reports by the European environmental NGO,

Sandbag, based in the UK, were instrumental in deciphering the inner workings of the EU's ETS.

Finally, non-traditional sources of information such as blogs were able to provide information and analysis on very specific issues that were not covered by any of the above-mentioned sources. A blog by Julian L. Wong (2010a), called *The Green Leap Forward* provided up-to-date and accurate coverage of developments in China's environment and energy policies. His blog informed me about a mailinglist, called the Beijing Energy Network (<http://groups.google.com/group/beijing-energy-network?pli=1>), for professionals interested in the latest development in China on energy, climate change, economy, environment, etc. A blog by Joe Romm (2011), called *Climate Progress*, provided excellent coverage of the latest developments in climate science and American climate policies. Last but not least, George Monbiot's (2011) blog never failed to inspire with interesting and new interpretations of current events and climate policy in particular.

## **Appendix IV: Timeline**

<b>2005</b>	February	Publication of European Commission Communication “Winning the Battle Against Global Climate Change”
		Entry into force of the Kyoto Protocol
	September	8th EU-China Summit in Beijing, China: Joint declaration on climate change
	December	11 <sup>th</sup> Conference of the Parties in Montreal, Canada
<b>2006</b>	September	9 <sup>th</sup> EU-China summit In Helsinki, Finland
	December	12 <sup>th</sup> Conference of the Parties in Nairobi, Kenya
<b>2007</b>	January	Publication of European Commission Communication “Limiting Global Climate Change to 2 degrees Celsius. The way ahead for 2020 and beyond”
	November	10 <sup>th</sup> EU-China summit in Beijing, China
	December	13 <sup>th</sup> Conference of the Parties in Bali, Indonesia: Approval of Bali Action Plan
<b>2008</b>	January	Commission unveils proposals for Climate and Energy Package
	March	European Council agrees to adopt Climate and Energy Package by end 2008.
	April	Start of negotiations between the Parliament, the Commission and the French Presidency
	December	Approval of EU Climate and Energy Package by European Council
		Climate and Energy Package endorsed by European Parliament
		14 <sup>th</sup> Conference of the Parties in Poznań, Poland
<b>2009</b>	January	Publication of European Commission Communication “Towards a comprehensive climate change agreement in Copenhagen”
	May	11 <sup>th</sup> EU-China summit in Prague, Czech republic
	June	Entry into force of the EU Climate and Energy Package

<b>2009</b>	June	Publication of European Commission Communication “Demonstrating Carbon Capture and Geological Storage (CCS) in emerging developing countries: financing the EU-China Near Zero Emissions Coal Plant project”
	July	G-8 meeting in L’Aquila, Italy, combined with meeting of the Major Economies Forum
	September	Preparatory UNFCCC Conference in Bangkok, Thailand
		Publication of European Commission Communication “Stepping up international climate finance: A European blueprint for the Copenhagen deal”
	October	Council of the EU Environment Ministers. Final decision on the EU’s negotiation mandate for the Copenhagen conference
	November	Preparatory UNFCCC Conference in Barcelona, Spain
		12th EU-China Summit in Nanjing, China
	December	15 <sup>th</sup> Conference of the Parties in Copenhagen, Denmark
		Decision of the European Commission on the list of sectors and sub-sectors which are deemed to be exposed to a significant risk of carbon leakage
<b>2010</b>	January	Submission of association with the Copenhagen Accord by January 31
		Publication of European Commission Communication “International climate policy post-Copenhagen: Acting now to reinvigorate global action on climate change”
	May	Publication of European Commission Communication “Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage”
	October	13 <sup>th</sup> EU-China summit in Brussels, Belgium
	November	Publication of Draft Commission Regulation on the use of international credits from projects involving industrial gases
	December	16 <sup>th</sup> Conference of the Parties in Cancun, Mexico

## **Appendix V: Interview Protocols**

Below, you can find the interview protocols used during the semi-structured interview in January 2010 in Brussels. Depending on the position of the interviewee (EU, China or other), the questions were adapted. These questions were sent via email to the interviewee a couple of days before the date of the interview.

**General introduction to the interview**

My research interest focuses on the EU's leadership in global climate change negotiations, in particular with regard to mitigation targets. Given China's major importance (combining the status of the world's largest greenhouse gas (GHG) emitter with the status of a developing country under the Kyoto Protocol, i.e. without mitigation targets), I wish to focus on the EU's ability to influence the traditional Chinese negotiation position, which commits China only to carbon intensity targets. This means that China's emissions will not peak anytime soon. Given the EU's strategic objective of limiting global warming to not more than 2 degrees Celsius, it is quintessential to push China to accept targets that reduce its emissions in the medium term. However, the Rio Convention's principle of 'common but differentiated responsibilities' is front and centre in China's approach to the climate change negotiations. How does the EU push for a policy change to occur in China?

**Topic 1: EU leadership**

Introduction

The EU was able to successfully push for the entry into force of the Kyoto Protocol by being able to convince key countries to ratify. In the lead-up to Copenhagen, European officials have again claimed a leadership role for the EU.

Question

What is the main driver for the EU's leadership, given the obvious economic costs of shifting the EU to a low-carbon economy?

**Topic 2: Copenhagen agreement**

Introduction

The EU has set itself the goal of "a fair and effective UN climate change agreement that sets the world on a path to preventing global warming from reaching dangerous levels" (European Commission, 2009c). Such an agreement was not achieved in Copenhagen with the last-minute 'Copenhagen Accord'.

### Question

From the EU's perspective, what were the main obstacles to such "a fair and effective" agreement?

### **Topic 3: EU and Annex-I countries' targets**

#### Introduction

Since 2007, the EU has committed itself to 'unilaterally' reducing GHG emissions by 20% by 2020. Apart from setting its internal targets, the EU is clearly seeking to engage other key global partners, in particular by encouraging other developed countries to join its carbon market. To demonstrate this commitment, the EU is willing to cut its GHG emissions by up to 30% by 2020, provided other developed countries agree to the same obligation. The EU has insisted on the need for "comparability of efforts" between Annex-I countries. However, particularly in the US, progress has been very slow and the proposed American targets are not in line with recommendations of the Intergovernmental Panel on Climate Change. The EU as a leader has not been able to recruit many followers.

### Question

What were the main obstacles for the EU's leadership vis-à-vis other industrialized countries? What has been the EU's strategy to overcome the slow progress (e.g. gaining recognition for the "Kyoto base year 1990 as the historical reference point when determining further contributions to the global emission reduction effort after 2012")?

### **Topic 4: EU and developing countries, China in particular**

#### Introduction

Over time, the EU will also seek to include developing countries that are large emitters, calling on them "to limit the rise in their GHG emissions through nationally appropriate actions to 15-30% below baseline by 2020" by adopting "low-carbon development strategies by the end of 2011". At the 2009 United Nations General Assembly, Chinese President Hu Jintao promised of a "notable" decrease in the carbon intensity of China's economy by 2020, which was later specified to be a 40-45% emission intensity reduction by 2020, compared to 2005 levels. Given the principle of 'common but differentiated

responsibilities', the EU needs to strike a balance – with regard to China – between an effective approach (which would impose targets on China as the world's largest polluter) and a fair approach (which would recognize China as a developing country with relatively low per capita emissions).

#### Question

What were in your view the main obstacles for the EU's leadership vis-à-vis developing countries? What has been the EU's strategy to overcome China's insistence on the principle of 'common but differentiated responsibilities' and that the historical responsibility for global warming resides in the North?

### **Topic 5: Using international offsets in the Emission Trading Scheme and the EU's leadership role vis-à-vis China**

#### Introduction

The 2004 Linking Directive allows the use of international offsets (e.g. the Clean Development Mechanism) within the Emission Trading Scheme to meet the EU's mitigation targets under the Kyoto Protocol. In a 2009 report, the European Environment Agency has stated that such offsets will be necessary, if the EU wants to achieve these targets. This has been criticised by environmental NGOs as "the EU buying its way out of the climate change problem", as it reduces the need for domestic reduction efforts.

#### Question

How does the important role of international offsets under the Clean Development Mechanism in the EU's carbon market influence the EU's leadership role vis-à-vis developing countries? And China in particular, China being a major recipient of CDM projects?

### **Topic 6: China's policy discourse**

#### Introduction

China's leadership has consistently emphasized China's sovereign right to develop. Economic growth remains its main priority over 'distractions' such as environmental

protection, which could slow down its fast-paced growth. Yet, every top-level meeting between the EU and China addresses climate change.

### Question

Given the EU's uphill battle in convincing China of the need to reduce emissions, how does the EU influence e.g. Chinese energy and climate change policies? Are there any signs that the EU has been able to influence?

In exchanges with Chinese officials, what arguments does the EU use to convince them that it is in China's best interest to start pursuing a low-carbon growth strategy? For example, cost-benefit 'no-regrets' analyses (à la the Stern report), 'green jobs', regional instability and security threats linked to climate change, impact on human health or food security and so on.

Given China's poor record of enforcing its environmental protection regulation (and the importance of 'measurable, reportable and verifiable' commitments for non-Annex I Parties), how does the EU support capacity-building of the Chinese state in environmental matters?

**General introduction to the interview**

My research interest focuses on the EU's leadership in global climate change negotiations, in particular with regard to mitigation targets. Given China's major importance (combining the status of the world's largest GHG emitter with the status of a developing country under the Kyoto Protocol, i.e. without mitigation targets), I wish to focus on the EU's ability to influence the traditional Chinese negotiation position, which commits China only to carbon intensity targets. Given the EU's strategic objective of limiting global warming to not more than 2 degrees Celsius, the EU want to convince China to let its emissions peak as soon as possible. However, the Rio Convention's principle of 'common but differentiated responsibilities' is front and centre in China's approach to the climate change negotiations. How does the EU push for a policy change to occur in China?

**Topic 1: EU leadership**

Introduction

The EU was able to successfully push for the entry into force of the Kyoto Protocol by being able to convince key countries to ratify. In the lead-up to Copenhagen, European officials have again claimed a leadership role for the EU.

Question

What is the Chinese government's perception of the EU's 'leadership' in the negotiations on climate change?

**Topic 2: Copenhagen agreement**

Introduction

The EU has set itself the goal of "a fair and effective UN climate change agreement that sets the world on a path to preventing global warming from reaching dangerous levels" (European Commission, 2009c). Such an agreement was not achieved in Copenhagen with the last-minute 'Copenhagen Accord'.

Question

Has the EU been able to combine a focus on 'effectiveness' (i.e. ambitious mitigation targets) with 'fairness' (i.e. recognizing differential per capita greenhouse gas emission levels)?

### **Topic 3: EU and Annex I countries' targets**

#### Introduction

Since 2007, the EU has committed itself to 'unilaterally' reducing GHG emissions by 20% by 2020. Apart from setting its internal targets, the EU is clearly seeking to engage other key global partners, in particular by encouraging other developed countries to join its carbon market. To demonstrate this commitment, the EU is willing to cut its GHG emissions by up to 30% by 2020, provided other developed countries agree to the same obligation. However, particularly in the US, progress has been very slow and the proposed American targets are not in line with IPCC recommendations. The EU as a leader has not been able to recruit many followers.

#### Question

What are in your view the main obstacles for the EU's leadership vis-à-vis other industrialized countries? Has the EU's strategy been able to overcome slow progress on this issue?

### **Topic 4: EU and developing countries, China in particular**

#### Introduction

Over time, the EU will also seek to include developing countries that are large emitters, calling on them "to limit the rise in their GHG emissions through nationally appropriate actions to 15-30% below baseline by 2020" by adopting "low-carbon development strategies by the end of 2011". At the 2009 United Nations General Assembly, Chinese President Hu Jintao promised of a "notable" decrease in the carbon intensity of China's economy by 2020, which was later specified to be a 40-45% emission intensity reduction by 2020, compared to 2005 levels. Given the principle of 'common but differentiated responsibilities', the EU needs to strike a balance – with regard to China – between an effective approach (which would impose targets on China as the world's largest polluter) and a fair approach (which would recognize China as a developing country with relatively low per capita emissions).

### Question

What are in your view the main obstacles for the EU's leadership vis-à-vis developing countries? Has the EU's strategy been able to overcome China's insistence on the principle of common but differentiated responsibilities and the fact that the historical responsibility for global warming resides in the North?

## **Topic 5: Using international offsets in the ETS and the EU's leadership role vis-à-vis China**

### Introduction

The 2004 Linking Directive allows the use of international offsets (e.g. the Clean Development Mechanism) within the Emission Trading Scheme to meet the EU's mitigation targets under the Kyoto Protocol. In a 2009 report, the European Environment Agency has stated that such offsets will be necessary, if the EU wants to achieve these targets. This has been criticised by environmental NGOs as "the EU buying its way out of the climate change problem", as it reduces the need for domestic reduction efforts.

### Question

How does the important role of international offsets under the Clean Development Mechanism in the EU's carbon market influence the EU's leadership role vis-à-vis developing countries? And China in particular, China being a major recipient of such projects?

## **Topic 6: China's policy discourse**

### Introduction

China's leadership has consistently emphasized China's sovereign right to develop. Economic growth remains its main priority over 'distractions' such as environmental protection, which could slow down its fast-paced growth. Yet, every top-level meeting between the EU and China addresses climate change.

### Question

Has the EU been able to influence e.g. Chinese energy and climate change policies? What arguments does the EU use in exchanges with Chinese officials to convince them that it is in China's best interest to start pursuing a low-carbon growth strategy?



## Interview Protocol for other actors

### **General introduction to the interview**

My research interest focuses on the EU's leadership in global climate change negotiations, in particular with regard to mitigation targets. Given China's major importance (combining the status of the world's largest GHG emitter with the status of a developing country under the Kyoto Protocol, i.e. without mitigation targets), I wish to focus on the EU's ability to influence the traditional Chinese negotiation position, which commits China only to non-quantified carbon intensity targets. This means that China's emissions will not peak anytime soon. Given the EU's strategic objective of limiting global warming to not more than 2 degrees Celsius, it is quintessential to push China to accept targets that reduce its emissions in the medium term. However, the Rio Convention's principle of 'common but differentiated responsibilities' is front and centre in China's approach to the climate change negotiations. How does the EU push for a policy change to occur in China?

### **Topic 1: EU leadership**

#### Introduction

The EU was able to successfully push for the entry into force of the Kyoto Protocol by being able to convince key countries to ratify. In the lead-up to Copenhagen, European officials have again claimed a leadership role for the EU.

#### Question

Has the EU been able to deliver leadership to the negotiations on climate change?

### **Topic 2: Copenhagen agreement**

#### Introduction

The EU has set itself the goal of "a fair and effective UN climate change agreement that sets the world on a path to preventing global warming from reaching dangerous levels" (European Commission, 2009c). Such an agreement was not achieved in Copenhagen with the last-minute 'Copenhagen Accord'.

#### Question

Has the EU been able to combine a focus on ‘effectiveness’ (i.e. ambitious mitigation targets for Annex I and non-Annex I states) with ‘fairness’ (i.e. recognizing differential per capita greenhouse gas emission levels)?

### **Topic 3: EU and Annex I countries’ targets**

#### Introduction

Since 2007, the EU has committed itself to ‘unilaterally’ reducing GHG emissions by 20% by 2020. Apart from setting its internal targets, the EU is clearly seeking to engage other key global partners, in particular by encouraging other developed countries to join its carbon market. To demonstrate this commitment, the EU is willing to cut its GHG emissions by up to 30% by 2020, provided other developed countries agree to the same obligation. The EU has insisted on the need for “comparability of efforts” between Annex-I countries. However, particularly in the US, progress has been very slow and the proposed American targets are not in line with recommendations of the Intergovernmental Panel on Climate Change. The EU as a leader has not been able to recruit many followers.

#### Question

What are in your view the main obstacles for the EU’s leadership vis-à-vis other industrialized countries? Has the EU’s strategy been able to overcome slow progress on this issue?

### **Topic 4: EU and developing countries, China in particular**

#### Introduction

Over time, the EU will also seek to include developing countries that are large emitters, calling on them “to limit the rise in their GHG emissions through nationally appropriate actions to 15-30% below baseline by 2020” by adopting “low-carbon development strategies by the end of 2011”. At the 2009 United Nations General Assembly, Chinese President Hu Jintao promised of a “notable” decrease in the carbon intensity of China’s economy by 2020, which was later specified to be a 40-45% emission intensity reduction by 2020, compared to 2005 levels. Given the principle of ‘common but differentiated responsibilities’, the EU needs to strike a balance – with regard to China – between an

effective approach (which would impose targets on China as the world's largest polluter) and a fair approach (which would recognize China as a developing country with relatively low per capita emissions).

#### Question

What were in your view the main obstacles for the EU's leadership vis-à-vis developing countries? What has been the EU's strategy to overcome China's insistence on the principle of 'common but differentiated responsibilities' and that the historical responsibility for global warming resides in the North?

### **Topic 5: Using international offsets in the Emission Trading Scheme and the EU's leadership role vis-à-vis China**

#### Introduction

The 2004 Linking Directive allows the use of international offsets (e.g. the Clean Development Mechanism) within the Emission Trading Scheme to meet the EU's mitigation targets under the Kyoto Protocol. In a 2009 report, the European Environment Agency has stated that such offsets will be necessary, if the EU wants to achieve these targets. This has been criticised by environmental NGOs as "the EU buying its way out of the climate change problem", as it reduces the need for domestic reduction efforts.

#### Question

How does the important role of international offsets from the Clean Development Mechanism in the EU's carbon market influence the EU's leadership role vis-à-vis developing countries? And China in particular, China being a major recipient of CDM projects?

### **Topic 6: China's policy discourse**

#### Introduction

China's leadership has consistently emphasized China's sovereign right to develop. Economic growth remains its main priority over 'distractions' such as environmental protection, which could slow down its fast-paced growth. Every top-level meeting between the EU and China addresses climate change.

Question

Has the EU been able to influence e.g. Chinese energy and climate change policies?

To what extent have the recently announced emission intensity targets of China been influenced by the EU's promotion of a low-carbon growth strategy for China?

What tools has the EU used most successfully in promoting ambitious mitigation targets (e.g. capacity-building, technological cooperation, financial support, diplomacy and so on)