

**On the Energy Humanities:  
Contributions from the Humanities, Social Sciences, and Arts to Understanding Energy  
Transition and Energy Impasse**

**A. Project Description**

What social, cultural and political changes are necessary to facilitate a full-scale transition from fossil fuels to new forms of energy? Making the shift from today's energy systems to new ones will require not only technological innovation and development, but also significant transformations in the way we manage our resources and live our lives. The dominant form of energy of any given era shapes the characteristics and capacities of societies in an *essential* way; energy is a key aspect of the fabric of our social experience, and not just a neutral input that helps run the engines of our economies and societies. Given such social significance, what repercussions might follow a transition from fossil fuels to renewable energy? How might an understanding of the deep links between dominant modes of energy and socio-cultural forms (e.g., political systems, legal frameworks, educational practices, organization and experience of daily life) illuminate crucial changes that must be made to manage energy transition in a productive way? And how might research in the humanities, social sciences, and arts enable us more effectively to address those impasses that have to date prevented more serious social and cultural engagement with the problem of energy transition?

The developing field of the “energy humanities”<sup>1</sup> has begun to help us understand more fully the many types of cultural *impasse*—habits and practices of being, believing and belonging—that stand in the way of the forms of energy *transition* we will need to undertake this century as we move to a post-fossil fuel world. The aim of this SSHRC Knowledge Synthesis Project “On the Energy Humanities” (OEH) is:

- (1) to engage in a survey and synthesis of current research in the humanities, social sciences, and arts on the socio-cultural and socio-political dimensions of energy impasse and energy transition; and
- (2) to identify gaps in existing knowledge, as well as areas in which additional, important work remains to be done.

With the assistance of this SSHRC grant, the team of researchers involved in OEH will produce a map of the existing field of research on energy impasse and transition in the humanities, social sciences, and arts, with specific attention to Canada. As our work in this area of research is underway, we are aware that it is necessary to attend in particular to three key gaps that our collaboration has already identified:

- (a) research on **aboriginal communities**, energy impasse and energy transition;
- (b) specific attention to the role played by **social media** in propelling or inhibiting energy change; and
- (c) contributions made by projects of **research-creation** to the investigation and communication of energy impasse and transition.

“On the Energy Humanities” focuses on the first of the two questions about energy and natural resources identified in SSHRC’s “Imagining Canada’s Future” initiative: “What will be the cultural, environmental, economic, gender, political and social implications of the quest for and extraction, production and use of energy and natural resources in Canada?” Within this larger question, our synthesis project will emphasize SSHRC’s sub-questions (b), (c), (d) and (g). These questions, which emphasize shifts in and disruptions to values, cultures, and communities as a result of energy transition, are ones that those of us in this project have already begun to investigate through

Szeman / University of Alberta / Theme 1 (b, c, d and g) / 2 of 9  
our involvement in the activities of the Petrocultures Research Group (PRG; [www.petrocultures.com](http://www.petrocultures.com)) based at the U of A, as well as the international research project being developed under its auspices: “After Oil: Explorations and Experiments in the Future of Energy, Culture and Society” (AO; [www.ateroil.ca](http://www.ateroil.ca)).

We know this to be essential work. Energy is a perfect example of an issue that exceeds the traditional division of labour within the university. “Energy humanities” is a field of scholarship that (like medical humanities and digital humanities before it) overcomes traditional boundaries between the disciplines, and between academic and applied research. The results of our SSHRC project will highlight the essential contribution that the insights and methods of the human sciences can make to energy and climate change—areas of study and analysis once thought best left to the natural sciences. This isn’t a case of the humanities simply helping their cross-campus colleagues to learn the mechanics of communication so that they might better articulate their ideas. Rather, the scholarship that this project will synthesize will demonstrate how the scale and complexity of the issues being explored demand insights and approaches that transcend old school disciplinary boundaries, both within academia and beyond: a key component of this project will be to network with community, industry and government.

### **B. Expertise and Experience of Research Team**

The research team assembled to pursue “On the Energy Humanities” has significant experience in the “energy humanities” as an emerging field, contributing analyses of the cultural, social and political challenges, problems and possibilities of an unprecedented, global transition from oil-based societies to non-fossil fuel societies. Team members have participated variously in the international conferences staged by PRG at the University of Alberta (2012) and McGill University (2014), as well as the recent five-day “After Oil School” at the U of Alberta (2015). Each brings his or her own specific experience to this Knowledge Synthesis Project:

**Imre Szeman** (CRC; Principal Investigator) has published widely on oil, energy and environmental studies, establishing himself in the process as one of the leading voices in the field of energy studies. This includes essays in journals such as *Anthropological Quarterly*, *Journal of American Studies*, *Journal of Canadian Studies*, *PMLA*, *Radical Philosophy*, *Resilience: A Journal of the Environmental Humanities* and *South Atlantic Quarterly*, as well as the publication of papers in a wide range of academic collections. Over the past five years, he has been invited to give lectures about oil, culture and energy transition at universities across the world. By the end of 2016, he will have four books in print on energy and the environment—*On Empty: The Cultural Politics of Oil* (Fordham University Press), *Fueling Culture: Energy, History, Politics* (co-ed, Fordham University Press), *Petrocultures: Oil, Energy, Culture* (co-ed, McGill-Queen’s University Press), and *Globalization, Culture, Energy: Selected Essays, 2000-2013* (Henan University Press), a translation of his essays on energy and the environment into Chinese.

**Ruth Beer** (Co-Investigator) is an artist and researcher interested in interdisciplinary approaches to artistic practice. Her artwork, including sculpture, video, photography and interactive projections, has been presented in national and international exhibitions. She is the recipient of several major SSHRC grants for research-creation projects including *Trading Routes: Grease Trails, Oil Pipelines* (2013-2017, Beer PI), a project that seeks to promote dialogue and exchange through artistic production to address the complex cultural and ecological impacts related to the expansion of natural resource extraction industries in the contested terrain of Canada’s Northwest.

**Warren Cariou** (CRC; Co-Investigator) is Director of the Centre for Creative Writing and Oral Culture at the University of Manitoba, where he has led several artistic and critical initiatives relating to energy and Indigenous cultures. His films *Overburden* and *Land of Oil and Water* examine the effects of bitumen mining upon Indigenous communities in Alberta and Saskatchewan, including his own Métis community. His photography project, *Petrography*, utilizes naturally occurring bitumen gathered from the banks of the Athabasca River to create photographs that represent the environmental and social effects of bitumen mining developments. He has also published fiction, poetry and scholarly articles about Indigenous cultures in numerous journals and edited collections. Cariou has delivered numerous conference presentations and keynote addresses about Indigeneity and energy, and has given testimony before the Manitoba Clean Environment Commission. He is now working on a book about Indigenous approaches to energy, focusing on traditional values and practices as well as promoting energy security for contemporary and future Indigenous communities.

**Mark Simpson** (Co-Investigator) teaches American literature, cultural studies, and critical theory at the University of Alberta. His current research explores the significance of energy as substance and concept in historical and contemporary struggles over mobility as a social and political resource. Relevant publications include the monograph *Trafficking Subjects* (Minnesota 2004), a co-edited special issue of *English Studies in Canada* on “Traffic” (2011), a co-edited special issue on “resource aesthetics” invited for submission to *Postmodern Culture* by its editor (in process), chapters in book collections including *Petrocultures* (McGill-Queen’s, forthcoming), *Fueling Culture* (Fordham UP, forthcoming), *Negative Cosmopolitanisms* (McGill-Queen’s, forthcoming), and *Material Cultures in Canada* (Wilfred Laurier UP, 2015), and essays in journals including *Essays on Canadian Writing*, *The Canadian Review of American Studies*, and *Cultural Critique*.

**Sheena Wilson** (Co-Investigator) is a professor of cultural studies and co-director of the Petrocultures Research Group at the University of Alberta. Her work focuses on the culture and politics of environmental issues, including climate change and the oil sands, along with intersectional feminist readings of human rights as we imagine new ways of being in relationship to energy and the environment. She is particularly interested in the impacts of the resource extraction economy on various stakeholders—Indigenous communities, activists and other dissenters, as well as the wider Alberta and Canadian public. In the fall of 2012 she co-hosted the first international conference on the cultural impacts of oil, called *Petrocultures: Oil, Energy, Culture*. She is editor of *Petrocultures: A Series in Energy Humanities*, a new book series with the U of Alberta Press. Current work includes a forthcoming collection titled *Petrocultures: Oil, Energy and Culture* (co-ed, McGill-Queen’s UP), and her scholarly monograph in progress, titled *Crude Intersectionalities*.

### **C. Work Plan and Timelines**

The work plan of “On the Energy Humanities” will unfold in two broad phases:

- (1) a **research** phase, initiated after the announcement of SSHRC results, that will last until the synthesis report is due in May 2016;
- (2) a **knowledge mobilization** phase that will begin with the Knowledge Mobilization Workshop held at the 2016 Congress at the University of Calgary.

During the **first phase**, research assistants at Emily Carr, U of Alberta and U of Manitoba (3 in total) will identify resources on energy transition and energy impasse from the arts, humanities and social sciences, drawing first on existing bibliographic resources established by PRG (e.g., the extended list of works cited in the book *Fueling Culture*). The RAs will work closely with the faculty based at each institution, who will give them guidance about directions in which to take their

Szeman / University of Alberta / Theme 1 (b, c, d and g) / 4 of 9 investigations. The full OEH team will hold a virtual meeting every two weeks to keep on top of the developing list of resources. The three RAs will input the resources that they locate into a single, shared resource, using an easily accessible and easy-to-use program (such as Google Sheets). Each of the RAs will work on one of the areas we have identified above: (a) **aboriginal communities** (RA @ U of Manitoba); (b) **social media** (RA @ U of A); and (c) **research-creation** (RA @ ECUAD). In addition, the RA @ the U of A will help coordinate communication among RAs and faculty, manage administrative details of the project, and engage in work on website updates and development.

The **second**, knowledge mobilization phase, will include a range of mechanisms through which the result of the knowledge synthesis will be shared with academics, members of the public, and policy makers in the government and the energy sector (see “Knowledge Mobilization Plan” below for further details). In the month between the end of the research phase and submission of the synthesis report, the co-investigators will work together to create distinct research outputs for each of these communities.

The **output** of this project will consist of a report that identifies and discusses the manner in which existing research in the energy humanities addresses the questions posed in SSHRC’s “Imagining Canada’s Future” initiative (Question 1 and sub-questions b, c, d and g), drawing on the full resources of research in the energy humanities, but with an especial emphasis on the research areas on which we have chosen to focus. This report will point clearly to gaps in existing research that needs to be addressed and identify directions for future study. We will also make available our research bibliography via the websites associated with this project.

2015	Activity or Event
	<b>Research Phase</b>
November	Beginning of research activities: Identification of main archives
December	<i>SSHRC Knowledge Mobilization Workshop (Ottawa)</i> [Attended by Warren Cariou and Sheena Wilson]
	<b>2016</b>
Dec to April 15	Research Phase
January 28	Symposium on 2015 Paris Climate Conference @ U of Alberta
April 15	Research reports from RAs Faculty and RAs write synthesis report
April 21-23	Preliminary results shared at “Cultures of Energy” conference at Rice University (direct costs covered by Rice) (Szeman will travel to Houston)
May	Synthesis report <b>due</b> on May 13 <sup>th</sup>
	<b>Knowledge Mobilization Phase</b>
June	<i>SSHRC Knowledge Mobilization Workshop (Calgary)</i> [Attended by Ruth Beer, Mark Simpson and Szeman]
June to November	Translation of synthesis report Afteroil.ca: website development to house research results and reports Reporting Session on OEH Knowledge Mobilization project at 2016 Petrocultures Conference (August 31-September 3, 2016)
Post-SSHRC Funding	Publication of report as an appendix of <i>Energy Humanities: A Reader</i> (under contract with Johns Hopkins University Press)

1. Dominic Boyer and Imre Szeman, “The Rise of Energy Humanities,” *University Affairs* (March 2014): 40.

**On the Energy Humanities****Budget**

<b>\$ Budgeted</b>	<b>Description of Activity or Event</b>
15000	<b>RAs</b>
10000	Research Assistant (Phd; U of Alberta) (10 hrs/wk @ 25 wks @ \$40/hr)
2500	Research Assistant (MFS; Emily Carr) (5 hrs/wk @ 20 wks @ \$25/hr)
2500	Research Assistant (MA; U of Manitoba) (5 hrs/wk @ 20 wks @ \$25/hr)
9500	<b>Knowledge Mobilization</b>
2500	Symposium on 2015 Paris Climate Conference @ U of Alberta
5000	Website Development
2000	Translation (to French)
4600	<b>Travel and Lodging<sup>1</sup></b>
	<b>Travel and Lodging - Ottawa</b>
500	Cariou Flight (Winnipeg – Ottawa – Winnipeg)
650	Wilson Flight (Edmonton – Ottawa – Edmonton)
400	Cariou + Wilson (one night lodging @ \$200 ea.)
300	Cariou + Wilson – Airport Transfers (\$140 Cariou; \$160 Wilson)
	<b>Travel and Lodging - Calgary</b>
300	Simpson– Drive from Edmonton (based on U of A per km rate)
350	Beer Flight (Vancouver – Calgary – Vancouver)
400	Beer + Simpson (one night lodging @ \$200 ea.)
200	Beer – Airport Transfers
0	Szeman Costs – to be covered via his CRC
	<b>Travel and Lodging – Houston (Rice University Conference)</b>
900	Szeman Flight (Toronto – Houston - Toronto)
400	Szeman (two nights lodging @ \$200 per night)
200	Szeman – Airport Transfers
<b>29,100</b>	<b>Total</b>
<b>- 5,000</b>	<b>CRC Contribution to RA @ U of A</b>
<b>24, 100</b>	<b>Total Request from SSHRC</b>

1. Flight costs between locations were identified on aircanada.com on September 2, 2015 for the dates of the listed events.

**Research Assistants:**

\$10,000 of the requested budget will go to support graduate student researchers—a substantial investment in the training of new scholars in energy humanities (an additional \$5,000 to support RA work will be contributed to this project by the CRC in Cultural Studies). The RAs we employ will benefit in several ways from their affiliation with this project. They will acquire knowledge of and insight into the intellectual contours of an emerging interdisciplinary field of inquiry. They will learn important skills in mapping and synthesizing such field knowledge in ways most useful to a range of audiences within and beyond the academy. They will learn to read for gaps in existing knowledge, and to pose and hone productive research questions that can foster inquiry through which to redress

such gaps. And they will gain invaluable experience in the crucial work of knowledge mobilization, not just in traditionally scholarly forms but also in emerging modes of outreach such as social media. (NB: The UA RA will receive twice as much as the others because of additional work in communication, administration, and web design, as described in Section c above, as well as the difference in rate for a doctoral student.)

**Knowledge Mobilization:** We have budgeted \$9,500 for three facets of our plan for knowledge mobilization: website development; translation of selected materials into French; and the mounting of a symposium at the U of A on the Paris climate conference and energy transition. The funding for website development will allow us to make the Petrocultures and After Oil websites the primary venues for the knowledge synthesis produced by our team. These websites have developed audiences and a wide range of end users as a result of previous projects undertaken by the research communities associated with both. The funding for translation will allow us to offer all primary website pages in French as well as English, and also to provide (at minimum) overviews of our knowledge synthesis in both languages. Lastly, the funding for the symposium will allow us to bring together researchers from across the academic disciplines, policy makers, and interested publics for a leading-edge conversation at the U of A in early 2016 on the implications of the late-2015 Paris climate conference for our approaches to energy transition—a conversation of great potential significance for the understanding and synthesis of cross-disciplinary knowledge in energy humanities going forward. We believe that enabling a discussion on the Paris climate conference, while important in its own right, will also allow us to further develop the networks and connections through which we will circulate the output of this project.

**Travel and Lodging:** The remaining \$4,600 will support travel by team members to events important to the process of knowledge mobilization. Two of these events, in Ottawa in December 2015 and May 2016, are organized by SSHRC as part of the Knowledge Synthesis grant. The third, the “Cultures of Energy” conference at Rice University, supplies an important opportunity for PI Szeman to share results of our ongoing research on energy impasse and energy transition—offering a preview of the knowledge-synthesis phase of the project—to an international, cross-disciplinary gathering of researchers in energy humanities.

## **On the Energy Humanities**

### **Knowledge Mobilization Plan**

The research team of “On the Energy Humanities” has significant previous experience with knowledge mobilization. All the members of this team are part of the larger Petrocultures Research Group based out of the University of Alberta. Projects carried out by team members have employed diverse media and genres (art exhibitions, academic writing, newspaper and magazine articles, fiction, documentary film, conferences, public events) to disseminate research to academic and professional communities, policy makers, and members of the general public. As a recent example, the Petrocultures Research Group organized “What Comes After Oil?”, an event held on August 21, 2015 that attracted 200+ people to the Art Gallery of Alberta to discuss the challenges of energy transition with representatives of NGOs, university, government and industry. The knowledge synthesis project proposed here will make use of a range of knowledge mobilization mechanisms, including: dissemination via academic publications, web information, symposia and conferences, and the creation of a public report on the project’s findings.

#### 1. Web dissemination: *Petrocultures* and *After Oil*

The existing Petrocultures (petrocultures.com) and the After Oil (afteroil.ca) websites already attract significant online traffic from around the world. The final project report and the bibliographic resources generated by the project would be posted at both sites and made freely available to end-users. We would also make use of this grant to create a French-language version of the primary elements of each website, which would further expand the community of users who will have access to our research.

#### 2. Symposium on 2015 Paris Climate Conference @ U of Alberta

“After Paris 2015” will be a one-day symposium at the University of Alberta in early 2016. It will bring together a panel of speakers to discuss and debate the outcomes of Paris 2015 from various disciplinary perspectives. Disciplines represented at the symposium may include American Studies, Cultural Studies, History, Political Theory, Environmental Economics and Policy, Environmental Law, and the Biological Sciences. The questions panellists will consider are:

- What were the successes and failures of Paris 2015 from the perspective of your discipline?
- What are the most potentially impactful changes proposed by Paris 2015 policy?
- In what capacities were the Paris 2015 policies insufficient?
- What new forms of political action were underwritten by the outcomes of Paris 2015?
- What does Paris 2015 mean for energy transition?
- What does Paris 2015 mean for Alberta and Canada in 2016?

#### 3. Conference Dissemination

The output of this project will be disseminated at three conferences in 2016. Each of these conferences will speak to a range of disciplinary communities, including important groups of scholars working on issues directly related to the questions concerning energy and natural resources identified in SSHRC’s “Imagining Canada’s Future” initiative. These conferences are:

##### *a. Congress 2016*

SSHRC will be hosting a session for all groups and individuals who received funding through the Knowledge Synthesis Program. Three members of our team will attend and share the results of our research with the Canadian academic community.

b. *“Cultures of Energy” (April 2016) – Rice University*

This annual event has become an important site for the circulation of research on values, cultures, and communities in relation to energy and the environment, and provides us with an excellent opportunity to circulate early research results to an international group of academics and policymakers. The networks of users we will reach through this conference at Rice are distinct from those with whom we will share our research at Congress.

c. *Petrocultures 2016*

The third iteration of Petrocultures is a four-day conference (August 31-September 3, 2016) that will bring together scholars, policy-makers, industry employees, artists, and public advocacy groups from across North America and beyond. Confirmed Keynote Speakers include: Barbara Neis (Memorial University); John Urry (Lancaster University) Helge Ryggvik (University of Oslo); Graeme MacDonald (University of Warwick); and Elizabeth Nyman (University of Louisiana at Lafayette). While we are not seeking funding for travel to this event, we do plan to disseminate our research results via a special panel that will involve the PI and co-applicants.

4. Appendix to *Energy Humanities: A Reader* (under contract with Johns Hopkins University Press)

This book seeks to channel and shape a remarkable recent movement in interdisciplinary humanistic scholarship—the rise of “energy humanities.” *Energy Humanities: A Reader* offers a carefully curated selection of the best and most influential work in energy humanities that has appeared over the past decade. To stay true to the diverse work that makes up this emergent field, selections range from anthropology and geography to philosophy, history and cultural studies, to recent energy-focused interventions in art and literature. We intend to include the report that will be generated from this project as an appendix to this volume, which will ensure that it will be accessed by a range of users for years to come.

5. Academic, Professional and Policy Networks

Through their previous and on-going work, the researchers involved in this project have access to a range of academic, professional and policy networks. These networks will be notified about our research results and informed about where they can access our final results. These include:

- a. *Petrocultures listserv*. The existing listserv is made up of over 250 experts in the field, each connected to their own research networks. This listserv is a useful tool not only to disseminate research, but also to put out requests for information and knowledge sharing that will help the three RAs on this project to quickly build a strong database of information.
- b. *“What Comes After Oil?” event*. We have developed linkages to policy makers and energy professionals through the public event recently held at the Art Gallery of Alberta that asked about the impact of the end of the fossil fuel era for Canada and Alberta.
- c. *Energy Futures Lab*. PI Szeman will be a member of this ‘think tank’ (energyfutures.com) that will include members of industry, government and NGOs. This Lab will begin in November 2015; Szeman will keep members of the Lab informed about developments in OEH.

## **On the Energy Humanities**

### **Proposal Summary**

The forms of energy dominant in any one era profoundly shape the attributes and capabilities of the societies in that era. As a result, a genuine and comprehensive shift in energy today demands not just an adoption of renewable, ecologically sustainable energy sources, but also a wholesale transformation in contemporary petroculture: the political structures, built environments, social dynamics, educational systems, discursive modes, values, practices, habits, feelings, and beliefs that might seem unrelated to energy—yet that exist as they do because of the shaping force of fossil fuels. Viewed in this way, the energy question is an inescapably human question, social and cultural, that centers on the values that frame our lives and the possibilities for a quality of life that might be made available to us by decoupling ourselves from fossil fuels. The energy question is, in other words, a question for the humanities, the social sciences, and the arts.

“Energy humanities” as an emerging academic field brings scholars from across a range of disciplines to work on the energy question from the perspective outlined here. Our Knowledge Synthesis project, “On the Energy Humanities,” will assess research across this field with two main objectives in view: to survey and synthesize current research in the humanities, social sciences, and arts that focus on the socio-cultural and socio-political dimensions of energy impasse and energy transition; and to identify gaps in existing knowledge as well as areas in which additional, important work remains to be done. Our work to date has already identified three key gaps to which this project will attend:

- research on aboriginal communities, energy impasse and energy transition;
- consideration of the role of social media in propelling or inhibiting energy change; and
- contributions made by projects of research-creation to the investigation and communication of energy impasse and transition.

We will circulate the results of our knowledge synthesis in a variety of ways, including: enhanced versions of existing websites ([petrocultures.ca](http://petrocultures.ca), [afteroil.ca](http://afteroil.ca)); listservs and social media; conference presentations; roundtable discussions open to a wide range of interested publics.