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Ilan Vertinsky and Dongsheng Zhou

For copies of this or other SFM publications contact:

Sustainable Forest Management Network
G208 Biological Sciences Building
University of Alberta
Edmonton, Alberta, T6G 2E9
Ph: (780) 492 6659
Fax: (780) 492 8160
<http://www.biology.ualberta.ca/sfm>

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**Legal Issues of Marketing and Certification: The
case of products from sustainable forests¹**

Ilan Vertinsky* and Dongsheng Zhou**

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* The Center for International Business Studies,
The University of British Columbia

** Department of Marketing, City University of Hong Kong

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Abstract

Asymmetries in information between buyers and sellers about product quality are causes of market failures. The frequency and importance of such market failures is increasing with the intensification of knowledge contents of products and the increase of buyers' interest in unobservable attributes of products including the nature of their production processes. Certification by credible third parties may reduce the frequency and mitigate consequences of market failures. Certification creates a variety of challenges for regulators including consumer and customer protection, maintenance of domestic competition and adherence to multi-lateral and bilateral trade rules. In this paper, we explore legal issues associated with the marketing of certified products using fiber from sustainably managed forests. We analyze the impacts of alternative domestic regulatory regimes and the potential consequences of the emerging international regime of certifying sustainable forests. We explore the implications of these regimes and country characteristics to the formulation of marketing strategies.

Introduction

Asymmetries in information about product qualities between buyers and sellers are becoming more pronounced and their consequences more significant. Several developments explain this trend: (1) the intensification of knowledge inputs in the production of goods and services; (2) the emergence of new types of markets and marketing channels which may increase uncertainties for buyers and sellers (e.g. e-commerce); and (3) societal value shifts which are reflected in heightened interests of buyers in characteristics of the production processes, not merely product or service attributes.

Intensification of knowledge inputs may be manifested in an increase in the degree of complexity and technical sophistication required to assess the quality of a product. Often, improvements in quality are not observable and can be ascertained without high expense only through long experience with the product. Indeed, because of risks of appropriation, sellers have

incentives to protect their intellectual property rights by making the knowledge content of products inaccessible to buyers. The emergence of electronic markets is constrained by asymmetries of information not only about products but also about the trustworthiness of buyers and sellers. The development of such markets requires institutional infrastructure which enables more secure exchange of information and assurance of business practices.

Shifts in values toward "post-materialistic" value systems in affluent societies have added another dimension to information asymmetries. Post-materialistic values imply internalization of social objectives into individual preferences (Inglehart 1981). Thus, the characteristics of the production systems and their impacts upon society (e.g. environmental impacts, impacts on "weak" social groups such as children and minorities) are incorporated in consumers' preferences and affect the decision to buy. A buyer cannot ascertain differences between identical products differentiated only by method of production without acquiring information about the methods and their social impacts.

Akerlof, in his seminal 1970 paper analyzing the consequences of information asymmetries, has shown that such asymmetries can imply that only poor quality products are attracted to the market, even though buyers are willing to pay for higher quality and suppliers can offer the desired quality. If acquisition of information by individuals is costly, then a way to resolve the market failure is to employ a credible third party that can provide the information to consumers before or at the point of purchase. Since there are economies of scale in generation of such information, the establishment of such "third party" organizations is a precondition for the emergence of differentiated markets for different qualities. Typically, such organizations generate the information about products and their processes of production (through research and auditing). Sellers apply and pay for certification and use product labels and/or advertising to inform consumers and customers.

There is a variety of legal and regulatory issues involved in the issuance of such certification of claims. Domestically, the major issues are: (1) the protection of consumers and customers from false claims by sellers and certifiers; (2) the establishment of quality standards by the certifying authority so as to increase social welfare (i.e. to correct the market failure); and (3) the protection of the integrity of the free market through preventing the exercise of market power or the creation of other market distortions (failures) by the certifier.

Internationally, the major issues involved with certification concern adherence to multi-lateral trade rules and other treaty obligations a country may have. Thus, for example, certification schemes that create disadvantages for exporters may be viewed as trade barriers, and not merely the exercise of the rights of a nation to protect the health and safety of its people and its environment.

In this paper, we explore these issues in the context of marketing of forest products. Specifically, we investigate certification of environmentally related claims of such products. We start with an analysis of the possible objectives of governments in regulating environmental certification of forest products and the legal and regulatory strategies through which it may attempt to achieve such objectives. We describe the alternative domestic regimes which may emerge internationally. We then analyze the objectives and strategies of key stakeholders in the certification system and investigate their abilities to influence the regulatory process and the certification processes in place. We then proceed to describe alternative certification systems now available in the marketing of forest products and the domestic legal and marketing issues involved with the operations of each. We then consider the legal issues that may arise from the operation of each certification system as a result of international trade law and environmental multilateral agreements. We conclude the paper by drawing out the implications of the analyses for the formulation of international marketing strategies.

Forest Certification: the international policy agenda, domestic regulatory objectives and strategies

Forests occupy roughly one-third of the earth's land surface and play a critical role in the functioning of the earth's biosphere. Forests are also an important source of economic wealth. Two percent of the world GDP originate from forest products. International trade in wood products is over US\$100 billion annually (CFAN 1998). Internationally, the recognition that forests must be managed in a sustainable way was formalized in the deliberations of the UN Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992. Despite lengthy intergovernmental negotiations that have taken place since UNCED, no international consensus on the precise definitions of Sustainable Forest Management (SFM) and its measurement or about the type and role of certification in bringing about SFM have been

reached.

The lacuna created by the lack of international consensus and legally binding agreements about forest certification has led to a diversity of approaches. Differences in domestic regulatory regimes concerning certification and the use of labels containing environmental claims reflect differences in objectives of governments and the regulatory strategies they choose.

Governments may see voluntary certification as a means of increasing general consumer awareness of the relationships of the forest industry to the environment, and as a means of modifying consumers' and manufacturers' behaviours. Governments may seek through certification to increase the public accountability of forest products companies, to reduce public regulatory, monitoring and other administrative costs of improving forest management and to ensure that the multiple values of the forest are reflected in private decisions (Bass 1997b). To achieve social benefits from certification, governments may seek to (1) protect consumers from misleading claims; (2) influence the standards which certifiers employ; (3) ensure that certifiers are qualified and accountable; (4) validate information and research used by certifiers; and (5) prevent confusion by the public resulting from competing claims (and certifiers). Governments may also seek to reduce market distortion that may be created from certification processes, and may proactively seek certification process designs which maximize social welfare. Governments can also promote the use of certification through tax incentives and penalties as well as through legitimization (e.g. recognition programs), public education and promotion through the media. Governments may seek to regulate certifiers to protect the integrity of their own regulatory powers.

Governments may seek to protect consumers and customers from misleading information. Misleading information conveyed by labels or certification may not only encourage consumers and customers to purchase products which are not derived from sustainable forests but reduce the impact of certification processes based on valid claims. Kangun et al. (1991) found that 58% of the advertising of environmental product attributes in their sample contained at least one misleading deceptive claim. World Wide Fund for Nature, UK, found that, of more than 600 companies promoting their wood products as being from Sustainably Managed Forests only three were willing to substantiate their claim (Reed 1991).

Regulation of misleading advertising is the most coercive response available to

governments. Environmental advertising regulations have followed different models. The traditional approach is to ensure that advertised marketing claims are truthful (Church 1994). In Canada, for example, the legislative framework at the federal level treats misleading advertising as a criminal offence, thus demanding proof beyond a reasonable doubt of the commission of the offence and utilizing the criminal justice system as enforcement institution (Cohen 1991). In the US, in contrast, section 5 of the Federal Trade Commission Act (FTCA) gives the Federal Trade Commission (FTC) jurisdiction over advertising. The FTCA prohibits unfair or deceptive practices affecting commerce. The FTC interprets deception to mean representation, omission or practice that is likely to mislead the consumer acting reasonably in the circumstances to her detriment (Church 1994). In other countries, regulation provides for the conditions under which certain environmental claims can be made and the type of labels that can be used. Lack of consensus as to what constitutes a sustainably managed forest limits the ability of governments in most countries to employ effectively the use of such coercive measures in promoting SFM. Broad measures against misleading claims are not only difficult to enforce but may create disincentives for companies to communicate openly with their customers and consumers about issues surrounded by a degree of scientific uncertainty (and most environmental issues fall under this category).

An alternative model used in some jurisdictions is to mandate the publication of certain factual verifiable information. Such information may include merely the region where the wood fibers originate and species used, or may provide facts about a variety of environmental effects. The alternative model is for the government to define a set of measurable minimum standards which reflect its own definition of sustainable forest management. It also can regulate the circumstances under which, and the means through which (i.e. the certification and/or labelling process), sellers can make claims about the sustainability of the forests from which they derive their fiber inputs. The setting of standards provides the government with influence on the strategic use of the certification and or labels by marketers. In the European Union, for example, DGXI, the directorate responsible for environmental levels, adheres to the policy principle that eco-labelled products "should 'indicatively and initially' represent no more than 30 per cent and no less than 5 per cent of the market share, unless the rapid introduction of clean technologies justified a lower percentage" (OECD 1997:13). The effect on marketing strategies in such a case

is to allow product differentiation, and perhaps the ability for producers meeting the criteria, to command premium prices. The alternative is to set the standards at the minimum socially acceptable levels in attempt to drive out those who do not meet the level (through mandated minimum standard compliance regulations or through public/market education).

In addition to regulating private certifiers, governments may provide certification services directly to ensure total control. Alternatively, governments may facilitate the establishment of certification programs and then privatize all or parts of these government programs. Where governments opt for private certification schemes they may seek to regulate certifiers and certification processes to assure that (1) processes are transparent; (2) criteria and standards of certification are fair and do not involve discrimination or the exercise of market power by certifiers; (3) certification procedures are applied in a uniform way; (4) certifiers are qualified; and (5) certification procedures are consistent with the legal system in place. The government may use existing legislation (e.g. competition and fair trade laws) to regulate certifiers without the need to develop specialized regulations. Thus, for example, competition laws were used in the UK to reduce the influence of a buyers' club that promoted one kind of forest products certification. Alternatively, governments may take a neutral position with respect to certification and use general legislation in place (e.g. regulation of misleading claims discussed earlier) to prevent fraudulent (or excessively opportunistic behaviour). The government may play a variety of non-regulatory roles that affect the development path of forest certification. Such roles may include: (1) the provision of information and validation of research results on which certification standards are based, (2) the provision of information services facilitating choice of certifiers for customers and consumers, and (3) the provision of counseling services which facilitate interpretation of certification processes. Governments may issue guidelines to encourage harmonization of certification processes and thus reduce public confusion about the contents of alternative certification messages.

Government objectives with respect to regulating certification may be strategic. Certification may create new market niches and prevent problems of market access associated with boycotts. Certification may diffuse future pressures to tighten regulations which may increase regulatory costs and reduce industry competitiveness. Certification may be used to protect domestic industry. Certification may also form part of a government industrial strategy

to create international competitive advantage through a more demanding regulatory environment (Porter 1990, Porter and van der Linde 1995). Governments can also enhance the climb of companies up the learning curve of SFM using procurement regulations and policies. Indeed, procurement policies at all levels of government have been used to promote sales of certified wood products in the US and various European countries.

Generally, countries in Continental Europe (e.g. Austria and the Netherlands) are leaning toward strong intervention in shaping forest certification schemes and aggressive use of procurement policies and other economic incentives to encourage the certification of forest products. Other countries, such as Canada and the US, are taking a neutral position, leaving forest certification to competition between private interests including schemes developed by industry and others which are promoted by environmental groups. In Asia, governments have developed certification schemes to defend market access internationally (e.g. Indonesia) (Ghazali and Simula 1994). Little interest has been shown in certification to promote domestic consumption of certified products both in Asia and South America. Clearly, the role governments play in the certification process affects the domain of choice for both domestic marketers and exporters. However, the certification frameworks which emerge, the options they create and their market impacts, depend also on the action of non-governmental stakeholders in the certification arena.

Non-governmental Stakeholders

UNCED deliberations emphasized the importance of stakeholder involvement in sustainable forest management. Certification design and regulation is thus an intense political process. For the forest products industry, certification processes may be viewed as opportunities for differentiation and market creation and as means to create entry barriers and protect their markets. Certification (if controlled by industry) may be viewed as a means of coordination and reduction of competition in the environmental attributes of their products. Certification may be a preemptive move against tighter regulations and market actions by environmental NGOs. Certification may help the industry defend its social legitimacy (image). This is especially important when government regulations and enforcement are lax and allow some unsustainable forest managers to offend public sensibilities, affecting the demand for the products of the sector

as a whole.

The strategies the forest products industry may use to influence the regulatory process may include lobbying, the employment of indirect influence strategies such as the use of economic threats (e.g. reducing investment or migration to other jurisdictions) and the use of advocacy advertising and employment of adaptive marketing strategies (these will be discussed in a later section of the paper).

Environmental NGO's may see certification as a means of providing incentives for sustainable forest management as well as means to reduce market access of products made from fiber from unsustainable forestry operations. Certification processes are also viewed by environmental groups as vehicles for both public education of consumers and training of producers (Cabarle et al. 1995).

Customers (intermediate producers) of fiber products have played an important role in promoting and shaping certification processes. Responding to consumer pressures and environmental group actions (boycotts, protests, negative advertising), customers are increasingly demanding proof that the fiber they buy originates in SFM forests.

The interaction between customers and environmental groups has also found an expression in the formation of buyers' groups. For example, the World Wide Fund for Nature (WWF) encouraged the formation of buyers' groups in several countries. There are now 425 companies and non-profit forestry operations which belong to such clubs. Membership in the club involves a commitment to buy only certified products (in this case, products certified by certifiers approved by the Forest Stewardship Council). The clubs became important actors in regulatory debates (not only in their countries but also in sellers' countries). By controlling market access, they were responsible for creating demand for certified products. The existence of and strategies employed by buyers' groups may be at odds, however, with domestic competition laws and international trade rules. Indeed, the 95+ buyers' club in the UK had to change its charter to allow alternative (non-FSC accredited, but compatible) certification schemes because of legal actions under competition and fair trade laws.

All stakeholders "are likely to be important in bringing about sustainable forest management, but if certification is to be a part of the solution, the consumers' role is crucial; consumers must in some way respond to the differentiation of wood products in the market.

They must have a willingness to pay for the properties of the product implied in the certification sufficient to overcome the greater outlay" (Kiker and Putz 1996: 49). The magnitude of willingness to pay is unknown (though various studies suggested premia ranging from 5 – 10%, see for example, Forsyth 1998) but it is likely to grow as suppliers of certified products advertise, as environmental groups, buyers' clubs and certifying organizations intensify their educational efforts, and as media exposure increases.

Alternative Models of Certification in the Forest Products Sector

The specific design and functions of alternative certification schemes affect the legal issues that marketers and certifiers of forest products may face and the strategic options available to them. There are several key attributes to a certification system:

- (1) the structure of control in the certification system (Who decides on policies, how independent is the process?)
- (2) the degree of coercive powers it may have with respect to the target population (Is it mandatory? Voluntary? What are the costs of not certifying?)
- (3) the threshold standards for certification (i.e., What market share is targeted?)
- (4) the scope of certification (i.e., What is being certified? the product? the management system? the accuracy of information provided? What is the domain of certification? Is it prescriptive or based on objectives?)
- (5) The geographical scope of the certification process (Is it international? National? Or regional?)
- (6) The way certification is conveyed to the market (e.g. Can product labels be used? Can the certification be advertised?)

The structure of control in the certification system is key to the question of credibility. Certification systems run by environmental groups may be trusted by some consumers in certain countries more than those run by governments or industry (here again, marketers may consider different choices of certifiers depending on 'trustworthiness perception profiles' held by consumers in different countries). Since certifiers (especially 'for-profit' certifiers) face conflict of interest because of pressures from clients to relax standards to retain their business or reputational affects in obtaining new business, the existence of accreditation organizations is

required to maintain integrity and credibility. Similarly, systems run by clientelistic government departments (e.g. departments of industry or forests) are less trusted than those involving independent scientific and professional juries.

The degree of coercive powers with respect to target populations determines the coverage of the system and the size of market it relates to, as well as the choice that marketers have of whether to certify and with whom. Even in so called voluntary systems (i.e. systems which are not compulsory), controlled market access (e.g. by buyers' groups) leaves the marketer very little freedom of choice. Thus, for example, Western Forest Products of British Columbia, Canada is seeking Forest Stewardship Council accredited certification to be able to access the UK market which is controlled by the group of 95+, though it has preference for other certification schemes.

The threshold standards underlying a certification scheme decides the nature of product differentiation, market size and demand characteristics. Thus, for example, highly exclusive SFM labels may indicate access to a small market characterized by relatively inelastic demand and the potential for high premiums. A very inclusive standard may have an impact on industry standards and play a role in protecting sectoral demand (from substitutes) but may play no role in micro-marketing strategies.

Differences in the scope of certification create different incentives for firm behaviour and consumer responses. Certification of management systems is based on the idea that once a good management system that incorporates a process of continuous improvement is in place, the objective underlying the system (e.g. SFM) will be realized. Such a system sets standards and/or prescriptions for the management system, not the product.

The alternative is a system which prescribes standards for a product and the process of its production. Since timber is an intermediate product, the chain of custody must be verified so the certification can be used in the market for the final product. This may require the development of an elaborate information system tracing inputs along the value chain. The scope of certification is also reflected in the dimensions of certification. Certification can cover a specific measurable standard or attempt to reflect a multi-dimensional concept. The broader the concept represented, the higher the discretion of the certifier and the higher the tendency of governments to intervene and constrain such discretion. For the marketer, a certification process which results in a simple judgement meaningful to consumers provides an effective tool for differentiation and

product promotion. Provision of detailed factual information (e.g. performance on various measurable attributes) without judgement may be preferable to ensure consumer sovereignty, provided the consumer is sophisticated enough to draw the appropriate conclusions and the information processing costs for the consumer are relatively low.

A narrow geographical scope of certification affects the access of sellers to the system and thus creates the potential for discrimination against foreign sellers. Different certification processes provide alternative channels to inform consumers. These channels receive differential attention from regulators in different countries. For example, certification of environmental management systems of forests does not normally involve the granting of permission to use product labels. Such certification, however, can be used in corporate image building, and is becoming important in the sales of intermediate products by multi-nationals. Product certification involving chain of custody verification typically provides for the use of labels and logos which can directly affect purchase decisions by consumers.

There are three classes of SFM certifications available at present.

- (1) The Forest Stewardship Council (FSC) approach
- (2) The International Standards Organization approach (ISO)
- (3) National Certification Programs

These approaches identify standards, either with respect to the product and its processing, or the environmental management systems used. An alternative approach that can be employed with respect to forest products is one which considers a broader evaluation of the environmental friendliness of the product, tracing its impacts throughout its life cycle. This approach may have two variants, one which employs discretion and provides a verdict whether the product meets some preordained minimum standards and the other which requires the provision of verified environmental information throughout the life cycle without an overall judgement.

The FSC approach is the "only established international system of forest management certification.... It operates a complete package: a global set of 10 principles and criteria for good forest stewardship (which it hopes will be translated into many national standards); an international accreditation program for certifiers; a trademark which can be used in labelling products from certified forests; and a communication/advocacy programme" (Bass 1997a:10). The program, supported by the World Wide Fund for Nature, is backed by buyers' groups in nine

nations. The WWF through its Forest Life Campaign is committed to promoting the independent certification of 25 million hectares of forests by the year 2001. At present, the total FSC-certified area has reached 15 million hectares (WWF 1999).

The second approach to certification is through a framework provided by ISO 14000 series. It offers a framework for certifying environmental management systems (EMS). Unlike SFM certification (such as the one provided by FSC) the system applies both to management of the resource as well as the downstream production processes. "ISO 14001 takes a management systems standard approach that 'references' national regulations and legislation and the development of a corporate environmental policy. The corporate environmental policy will invariably require the development of the data and measurement that is the basis for continual improvement" (WTO 1998:15). Since ISO is an EMS certification, it does not allow for product labels. National and regional certification programs tend to follow either the SFM product certification approach or the ISO EMS certification approach or some combination of the two. Processes to implement national approaches are taking place in various countries: in Sweden, an FSC type system was developed by a multi-stakeholder committee; in Canada, an ISO-like system was developed by the Canadian Standards Association; in the UK, a committee established by the Forest Commission developed a system compatible with FSC Certification; in Finland, a committee established under the auspices of the Finnish government recommends a national system compatible with EU, FSC and ISO approaches.

The report of the Finnish committee reflects the concerns that exporters of Finnish forest products may have: "In order to ensure international credibility for the certification of Finnish forests, it is essential for certification to take place within the framework of an international system.... The more 'industrial' the organization the more clearly it prefers the ISO-based systems. The closer the organization is to consumers, the stronger the support for both certification and the FSC system." (Ministry of Agriculture and Forestry, 1997: 86). The alternative to approaches which provide judgements about performance is a certification system that provides information about performance on the multiple dimensions associated with environmental impact throughout the product life cycle, without attempting to certify an overall judgement on performance. The Environmental Data Sheet developed by the Canadian Pulp and Paper Association provides such information to meet customer concerns regarding the life cycle

environmental attributes of pulp and paper. The system is suitable for the use of bulk buyers of paper (customers) who ask for such information.

International Trade Law and Certification

From an international trade law perspective, the use of certification and labelling of environmental characteristics of products raises the question of whether distinctions made between products are legitimate distinctions or disguised trade barriers and, hence, illegal.

'Like product' issues arise under the GATT 1994 and the Agreement on Technical Barriers to Trade (TBT). The agreement established the principle that domestic measures should not be applied so as to offer protection to domestic production (i.e. discriminating against foreigners). The problem is especially difficult when claimed environmental benefits are not in the physical characteristics of the product, but the product has different environmental costs on a life cycle basis (because of differences in production processes or production environments). "If the physical likeness and cost elasticity factors outweigh the role of environmental factors when a broader test is applied, green product differentiation will be difficult. The traditional GATT/WTO antipathy towards dealing with process issues, especially foreign process issues, may also impact on their role in differentiating products" (Mann 1997:13).

From a trade perspective, the ISO approach is the least problematic among the certification systems. The ISO approach is based on a commitment to comply with domestic legislation and commitment to continuous improvement, hence, it does not involve discrimination against foreigners. The ISO system may, however, constitute a trade barrier because of the costs and acceptability of conformity assessment testing (WTO 1998). The FSC approach, which is prescriptive, may impose undue requirements on local producers. Indeed, local legislation which violates FSC principles may make it impossible for producers to obtain the certification (since they must respect both the regulation and the FSC principles). The difficulties of developing trade rules which simultaneously protect free trade and the environment, have led to the current position shared by a majority within the WTO of keeping SFM certification as a voluntary instrument. Thus, for example, the legislative proposal in the Netherlands to promote timber certification through fiscal incentives and procurement policies in the public sector will most likely be discouraged by the WTO. Voluntary schemes, however,

may also constrain market access in significant ways and thus, become effective market barriers. Indeed, as the supply of certified wood products increases, the ability of environmental groups to control access to markets is increasing. Recently, the World Bank and WWF agreed on a strategic alliance with one goal being the certification of 200 million hectares of forest by the year 2005 (Hansen 1998). This could mean about 6 percent of the world's production forests (Ghazali and Simula 1997). The challenge to international marketers is obvious.

Implications for Marketing Strategies

The changing mosaic of national regulatory environments and overarching international trade and environmental regimes present marketers in forest products companies with both challenges and opportunities. The traditional strategic vision of cost leadership and price competition in commodity markets is giving way to a new marketing paradigm. This paradigm sees the potential of differentiation not only in product attributes and services, but also differentiation based on the environmental and social attributes of the product through its life cycle. It contains regulatory systems and consumer and customer environmental preferences as variables subject to intervention. The paradigm sees the political processes involved with forest certification, both within nations and in the international arena, as important determinants of market access. The major decision variables for certification related international marketing strategies include: choice of products, markets, marketing channels, certification systems, pricing policies, promotional strategies and political influence strategies.

The environmental sensitivity of different wood products varies. There is evidence, for example, that in Europe and North America the demand for high-quality wood furniture is more sensitive to the degree of "greenness" of the product than it is elsewhere. In contrast, demand for cedar siding and shingles is less sensitive to environmental concerns in the same markets. Choice of a product for particular markets can thus affect the size of premia or discount that would be required to compete. A strategy of "environmental leadership" would imply looking for products and markets where the environmental sensitivity is high. If the exporters have, however, a disadvantage in delivering SFM products, they may seek to export to markets with low regulatory and consumer environmental demands. Thus, for example, exporting wood products to Asia or North America rather than Europe may reduce the impacts of environmental

concerns.

The choice of marketing channels also affects the environmental quality elasticity of a product. Environmental group actions can be targeted at different levels in the product value chain. Pressures may be brought to bear on industrial customers to switch a source of supply. The more diversified the sources of supply of an intermediary, the more likely it is to "switch" rather than fight. Thus, marketing channels which maintain diversified sources of supply provide choice targets for environmental groups' actions. To assess the environmental quality elasticity of a channel, the marketer must understand interest group politics in different countries as well as assess the economic vulnerabilities of the buyer. Customers with large investments in the marketing of brand consumer products, for example, are likely to shy away from certain input suppliers when facing environmental group pressures. It is not surprising that WWF chose mainly large diversified retailers in organizing its UK buyers' groups. Forest products firms that operate in highly cyclical markets are especially vulnerable during recessions when inventory build-up facilitates substitutions by customers. Choosing product niches where the firm has a great deal of market power reduces its vulnerability for environmental group pressures. Thus, for example, Pacific Bell Directories resisted pressures from the Rainforest Action Network to stop buying paper from MacMillan Bloedel which was the prime supplier in the market for the type of paper it used (Stanbury and Vertinsky 1997, RAN 1995). Since the development of civil society and the culture of social protest (and the regulatory system which molds it) differ between countries, choice of markets is important when considering exposure to market access risks.

The choice of a certification system mix must be adapted to the market, market segment and marketing channel chosen. Certification can be used to protect or gain market access, or as a means for product differentiation and creation of entry barriers. The market impact of certification depends on credibility. What is credible, however, varies depending on the market and the targeted segment of that market or the target of the certification message. Buyers in national cultures which respect authority may show preference for officially sanctioned certification systems. Thus, for example, buyers in Japan will be satisfied with a system recognized by authorities. In Europe, where environmental groups such as WWF and Greenpeace are highly respected and governments enjoy less authority, environmental groups'

endorsement of certification lends it credibility with consumers.

The choice of a certification system may, however, be motivated not by market differentiation or securing market access. Instead, marketers may choose to certify their products or firms as a defensive strategy, be it to reduce public pressures, maintain social legitimacy or prevent pressures for tighter government regulation. It may also be a means to coordinate competition in environmental performance.

The choice of a certification mix should reflect not only short term cost benefit calculations with respect to a specific market, but take into account possible shifts in market demand (e.g. the "Asian-flu" has flattened the once very promising Asian market for wood products and resulted in a shift of supply to the North American market) as well as changes in consumer environmental values and environmental group politics. Thus, for example, the rapid growth and expansion of buyers' groups in Europe may be followed, though with a lag, by similar developments in the US market. Such developments are less likely to take place in Asia. Internationalization of interest groups, however, is increasing the probability that customers around the world will demand some form of environmental certification.

National certification systems provide opportunities for industry to coordinate competition in environmental performance (much the way cartels coordinate prices). They also provide a means for the sector as a whole to protect "country image" and prevent tighter regulation. National certification, however, is not likely to have a high level of credibility with consumers in foreign countries.

Certification systems may be a target of influence strategies by marketers. If ensuring market access is the prime objective, marketers may attempt to influence a certification system (e.g. through cultivation of public opinion via advertising) to increase its inclusiveness. In contrast, influencing a certification system to increase its standards (making it more exclusive) is a means for creating entry barriers to certain markets for rivals or the means for creation and development of new markets where premium prices can be obtained.

The introduction of certification into certain markets may increase overall demand for forest products in some markets, while in other markets, substitution may be intense and total demand will drop. A marketer must therefore consider the differential affect of alternative certification mixes and pricing policies in different markets. Pricing policies for certified

products can be based on a long term objective of sustainable market development, where prices are maintained at relatively low levels that deflect new entrants into the differentiated market and avoid substitution by consumers to non-wood products. Alternatively, the objective of pricing policies may be to maximize short term profits (cash cow policies).

As we have already indicated, the choice of a certification system and a market determine in part the options available to communicate environmental messages and the effectiveness of alternative channels. Customers may often require only proof of certification and convey the environmental message through advertising and membership in buyers' groups. Retail outlets may, however, demand communication of the environmental messages through labels and point of purchase advertising.

Label contents are subject to differential regulatory constraints that must be satisfied. Thus, the options open to the marketer in designing the presentation of persuasive messages may vary between countries, reflecting the degree to which certification is regulated.

The articulation of an adaptive international marketing strategy with respect to certification of forest products requires a distinction between markets with high environmental quality elasticity (HEQE) for example, Germany, Austria and the Netherlands, and markets with low environmental quality elasticity (LEQE), for example, Japan and China. It requires also a distinction as to the nature of the product, is it upstream on the value chain or downstream (closer to the consumer)? In Table 1, we provide a summary of some of the main features that our analysis suggests should characterize the marketing strategy with respect to certification. We consider four main objectives that may underlie the strategy: ensuring market access, increasing differentiation, preventing regulatory tightening and/or reducing competition in environmental quality (a defensive objective), and erecting barriers to entry. For each objective, we identify both short-run and long-run strategies contingent on the country's environmental quality elasticity and the position of a product in the value chain.

(insert Table 1 here)

Examination of the table reveals important shifts in the marketing paradigm of forest products. Certification has introduced a new dimension of differentiation to a traditional

commodity market. Since certification is subject to intense political processes and possible government intervention, it enlarges the domain of the marketing strategy space to include activities which are intended to influence political processes as well as mold their impacts on markets.

Table 1
International Marketing Strategies for Certification

Objectives	LEQE Countries		HEQE Countries	
	Upstream Product	Downstream Product	Upstream Product	Downstream Product
Market Access				
SR	ISO Certification	No Certification	ISO and FSC Certification	FSC Certification with chain of custody verification and labels (logos)
LR	ISO Certification, lobbying and influence strategies to increase inclusiveness of certification systems	"Image" promotion and ISO Certification or National Certification to increase legitimacy	Influence strategies to increase inclusiveness of FSC and other certification programs	
Differentiation				
SR	ISO and FSC Certification. Encourage development of buyers' clubs	ISO and FSC Certification with chain of custody logos and labels. Highly targeted environmental quality focused media campaign	ISO and FSC Certification. Shop for a higher standard certification and endorsements (e.g. Green Peace)	ISO and FSC Certification with a chain of custody verification. Shop for a higher standard certification and endorsements (e.g. Green Peace)
LR	As above	As above plus public educational programs	Lobby for increased exclusiveness of FSC. Shop for a higher standard certification	
Defensive				
SR	National and ISO Certification. Lobbying activities. An image oriented media campaign		National and ISO Certification. Consultation with environmental NGOs.	
LR	As above		As above	

Objectives	LEQE Countries		HEQE Countries	
	Upstream Product	Downstream Product	Upstream Product	Downstream Product
Barrier Erection				
SR	Pricing policies to reduce entry incentives		Pricing policies to reduce entry incentives	Pricing policies to reduce entry incentives. Environmental brand creation advertising
LR	Influence strategies to shape certification to create competitive advantage		Influence strategies to shape certification to create competitive advantage	

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