Comparing forest certification schemes: the case of ratcheting standards in the forest sector

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This project evaluates the factors driving improvement of industry-sponsored private regulatory standards under conditions of competition in three-country contexts between 1995 and 2005. The paper provides a comparative analysis of regulatory competition in forestry in the USA, Sweden and Finland. While previous research has identified the importance of transnational supply chain pressure and of NGOs' direct targeting campaigns in diffusing and upgrading standards, this paper stresses the role of public comparison and environmental benchmarking that contributed to an upgrading of industry standards via competition between the Forest Stewardship Council and rival industry-sponsored schemes. The paper explores how transnational and national actors created important moments of public comparison in which substantive as well as accountability standards were ratcheted up while they diffused more broadly across industry. This project evaluates the role of environmental benchmarking in constructing and contesting the legitimacy of private regulation.

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1. Introduction

Since the early 1990s, environmental, social and human rights activists have responded to a lack of national legislation and international coordination of environmental, labour and human rights agreements by creating their own transnational regulatory institutions. Civil society groups, often in collaboration with industry, develop environmental and social standards and create enforcement systems meant to regulate economic production (Bartley, 2003; Meidinger, 2006). A broad array of public and private as well as national and international actors have been increasingly drawn into debates about environmental standards, which have been raised by civil society, and are adopting privately set standards to guide behaviour.

As various civil society standard-setting organizations, often operating at the global as well as the national level, have emerged, some economic actors, rather than joining these civil society initiatives, have developed their own standards and monitoring schemes (Gereffi *et al.*, 2001; Elliott and Freeman, 2003). Industry-led regulatory competitors have been institutionalized in the civil arena, often also coordinating across national borders. This situation raises questions about the impact of private regulatory competition: whether it will ratchet down private standards (Haufler, 2003) or, to the contrary, under which conditions civil regulatory competition might raise private standards. In this paper, the case of competing private standard-setting schemes in the forest sector is analysed to identify the processes that socially motivate improvements concerning the substance and accountability of standards (Gulbrandsen, 2005).

2. Private standard setting, legitimacy and public comparison

2.1 The transnational governance gap

Technical standards have been an important source of international economic coordination. Assuring compatibility and minimal quality requirements of products manufactured in different parts of the world, they have enhanced the opportunities for trade (Sykes, 1995; Latimer, 1997). However, with the advancement of a free trade regulatory regime, as structured by the General Agreements on Tariffs and Trade (GATT)/World Trade Organization (WTO), issues of setting and harmonizing social and environmental standards across borders have become more important, without being matched by the development of regulatory institutions (Charnovitz, 2000). It is in this context in which novel, private attempts at guidance and control have emerged in which civil society groups set standards, establish auditing and monitor performance. They perform state-like functions, yet often without the assistance or legitimation basis of governmental institutions (Gereffi *et al.*, 2001; Meidinger, 2003).

Nevertheless, governments are increasingly adopting private standards for public purchasing and state-owned forests. For instance, 12 US states have adopted certification schemes to audit forestry practices on state-owned lands (Lister, 2007). The UK, Dutch and Danish governments are accepting private certificates as evidence of legality and sustainability when purchasing timber products. Bolivia, Guatemala, Latvia and Poland also accept private certificates as evidence of sustainable production, and implement private schemes on public lands (Cashore *et al.*, 2006).

Civil society regulation systems often attempt to regulate along the entire supply chain, from producer to final point-of-sale ('chain-of-custody'). This is a non-trivial goal for two reasons. First, the current global governance regime of GATT/WTO case law discourages the unilateral imposition of national environmental regulations on imports, limiting governments' influence on world standards through domestic policies.¹ Second, success in reaching multi-lateral agreements for environmental and labour regulation has been limited, creating what some have referred to as a global governance gap (Reinicke, 1997; Knill and Lehmkuhl, 2002). Civil society organizations' creation of transnational standards that target the entire supply chain offer a possible backdoor approach to regulating global capital (Bartley, 2003).

Although the adoption of private standards is voluntary, actors apply them in response to pressures of social movements whose national and transnational campaigns target corporate reputation and draw on corporate fear of consumer reactions (Bartley, 2003; Cashore *et al.*, 2004; O'Rourke, 2005). Large retailers are demanding their upstream suppliers to implement the respective standards. Their adoption signals that production is supported by civil society stakeholders and may provide a shield against further pressures from civil society (Bartley, 2005). As large buyers and also states encourage or even demand suppliers to implement private standards, these become less voluntary in practice (Meidinger, 2006).

There is statistical evidence that levels of adoption of the voluntary environmental standards by firms in exporting countries are strongly associated with levels of adoption by firms in importing countries (Potoski and Prakash, 2005). And Gonzales *et al.* (2008) found a positive correlation between the existence of a certified environmental monitoring system in firms and the environmental demands that these firms imposed on their global suppliers. Furthermore, Christmann and Taylor (2006) show that Chinese suppliers in global supply chains implement certifiable management standards more seriously if they are monitored and expect sanctions by buyers. Studies like these demonstrate the importance of supply chains in the adoption of voluntary environmental programs, but implementation of high standards also seems to depend

¹The WTOs position on this is ambiguous. In the 1991 *Dolphin-Tuna* case it ruled that it is illegitimate to unilaterally impose national environmental regulations on imports, unless the exporting nation agrees. A later ruling, in the WTO *Shrimp-Turtle* case, allowed the US to impose its higher standards on imports, but only after consultation with affected countries and even if they still objected afterwards, the WTO allowed the US to impose turtle protection standards. The WTO continues to express concern that allowing unilateral imposition of standards will open countries with high environmental standards to impose trade barriers on the developing world. For this reason the WTO encourages resolving environmental issues through multilateral or bilateral agreements (WTO, 2002).

on the buyers' commitment to monitoring and sanctioning (Borck and Coglianese, 2009; Potoski and Prakash, 2009).

The adoption and diffusion of voluntary standards has been influenced also by social movement campaigns directly targeting companies (Bartley, 2007; Conroy, 2007). Gunningham et al. (2003) found that the tightening of national environmental regulation accounts for improvements in the environmental performance of pulp and paper mills, but social pressures by NGOs and local communities explained reactions beyond compliance performance. Firms whose managers are concerned about external stakeholders are more likely to adopt voluntary standards (Howard-Grenville et al., 2008). Larger firms that have public images and brand reputations to defend are more likely to be targeted by NGOs (Bartley and Child, 2007). They are more vulnerable to shaming campaigns and may be more easily pressured by activists and NGOs into adopting voluntary standards (Sasser et al., 2006; Conroy, 2007). While the effects of supply chains and the activity of NGOs have been identified and studied, few scholars of certification have evaluated the role of public comparison as well as strategic benchmarking and how they might interact with NGO and supply chain pressures in creating legitimacy for private transnational schemes.

2.2 Legitimacy and private regulation

Voluntary private transnational regulatory schemes do not enjoy the taken-for-granted legitimacy of public authority (Beisheim and Dingwerth, 2008); instead, private institutions must win the endorsement of legitimacy-providing communities, including those who seek to regulate (Cashore *et al.*, 2004; Black, 2008). Communities endowing private regulation with legitimacy might include a wide range of actors—competing standard setters, firms, consumer groups, purchasers, international financial institutions, charitable foundations and academic institutions. For instance, academics might legitimize or delegitimize a standard by writing favourably or unfavourably about its substance and procedures. States may accept it as evidence of state regulatory requirements. Supply chain actors may prefer or require one certification standard over another. Consumer groups, NGOs or international organizations may endorse one scheme in contrast to another.

In this general context, Bartley (2007) has pointed out the importance of the organizational *field* as a unit of analysis. The field is conceptualized as a 'socially constructed arena of self-referencing, mutually dependent organizations' (Bartley, 2007, p. 231). Organizational fields include not only network relations among actors but also the cognitive or symbolic constructions that provide order and meaning: 'It is the intersection of relations and meanings—networks and frames—that constitute an organizational field' (Bartley, 2007, p. 233).

In his own work, Bartley analyses the role of charitable foundations and how they offer legitimacy and material resources to private regulatory schemes and their NGO supporters. Shifting the analysis to fields provides a rich basis for the empirical analysis of legitimation. The challenge is to identify mechanisms that are likely to produce certain outcomes. It is the aim of this paper to examine the role of public comparison and public benchmarking in constructing the legitimacy of transnational certification schemes.

2.3 Benchmarking and public comparison in private regulation

Why would benchmarking and public comparison be an important mechanism in mobilizing legitimacy? The concept of benchmarking originates in the business literature, but is has also attracted the attention of scholars analysing new forms of experimentalist governance (Sabel, 1994, 2006; Kristensen and Zeitlin, 2005). Benchmarking has been seen as an organizational-learning mechanism and refers to a process of comparing business processes and practices among competitors on the basis of indicators, such as cost, quality or productivity in order to allow for improvements.² Organizational learning occurs when a firm reflects on its own performance and scans its environment for innovative ideas. Business benchmarking is thought to be especially useful in rapidly changing business environments where innovations in competing firms may lead to competitive advantage. Benchmarking is often hidden from the public's eye but, for example, in cases where groups of cooperating firms or firms along supply chains share information in order to upgrade a given supply chain it can become more public.

Environmental benchmarking as a particular learning strategy draws on similar principles scanning the environment for best practices. It is often used by firms to increase competitiveness or to address the concerns of stakeholders (Boks and Stevels, 2003; Matthews, 2003). In these cases, individual firms or co-operating firms undertake benchmarking from the 'inside' comparing their environmental practices to those of competitors. In contrast, environmental benchmarking *as a governance tactic or strategy* is used by *external* actors seeking to motivate firms to adopt costly environmental protection practices. NGOs and activists use benchmarking to shift manager's attention to the environmental performance of their organization and, at the same time, to arouse public interest in an organization's environmental performance. In contrast to internal benchmarking, externally benchmarked organizations may be put under pressure to produce public accounts of their activities and the

²As Kristensen and Zeitlin (2005, 254ff) observed, benchmarking can be used as a top-down control strategy as well as a diagnostic tool for reflexive monitoring.

environmental impact of those activities. Furthermore, the capacity to effectively generate organizational change by means of external benchmarking is likely to depend on the benchmarkers' ability to create the credible expectation that actors in the broader transnational field care about the benchmarked practices—be they consumers, government regulators, lenders, international organizations, etc. This observation links strategic environmental benchmarking back to the discussion of organizational fields and legitimacy-providing communities and raises questions about the interrelationship between benchmarking and expectations. It is important to note that legitimacy-providing communities need not have 'green' interests from the very beginning; it is rather the act of environmental benchmarking itself that might help to generate interest among actors in the field.

Furthermore, when external actors, such as environmental NGOs, use environmental benchmarking strategically one might expect targeted actors to adopt internal organizational routines to assess the damage being done to their reputation (Braithwaite and Drahos, 2002). One expectation is that targeted actors, e.g. firms or schemes, may undertake their own internal benchmarking exercise in order to evaluate whether the strategic benchmarking by external actors can be deflected or whether it should be addressed in terms of potential organizational changes. In doing this internal assessment, the targeted actor is likely to take into account the effects of damage to its reputation vis-à-vis its different legitimacy-providing communities that include employees, investors, supply chain-based business partners, regulators, etc. As a consequence of external benchmarking, legitimacy communities closely associated with a target firm might adopt evaluatory routines themselves to appraise the criticized behaviour and/or to assess the credibility of NGO allegations. This is more likely to occur in contexts where actors' fates and fortunes are highly intertwined: for example, between investors and targeted firms, in the context of global supply chains, but also between regulators and regulatees where official authority relationships exist. Thus, theoretically speaking, benchmarking might generate a variety of routines of evaluation and re-evaluation of relationships creating pressures for change beyond the original act of benchmarking itself.

Recent studies indicate that comparisons are an important mode of politics and persuasion in creating external pressure for organizational change (Espeland and Sauder, 2007). These authors find that categories or measurement constructs that draw attention to objective difference or relative performance prevent or minimize organizational decoupling—i.e. tendencies of organizational actors to ignore external pressure (Meyer and Rowan, 1977). Drawing attention to relative difference allows a variety of external actors to 'quickly grasp and represent differences'; this may stimulate public interest for causes, stimulate social mobilization or motivate change (Espeland and Stevens, 1998, p. 316). Simultaneously, it allows also for the social transgression of symbolic boundaries, such as 'green' vs. 'brown' or 'high-' vs. 'low-road' firms. Similarly, Fung *et al.* (2001) emphasize the importance of public comparison in their work on ratcheting of labour standards. This scheme advocates a performance-based governance regime where the state or an international authority compels firms to release information about environmental and labour performance. Creating a pool of information would enable public ranking and comparison of firms. The expectation is that public benchmarking and comparison will induce competition, leading to an environmental and social upgrading of production processes.

This paper looks at the role of benchmarking and public comparisons of competing certification standards, rather than of firms. In the case of forest certification standards, information on all existing schemes and their revisions is readily available and allows for a recurrent benchmarking and comparison of their development over time by legitimacy communities.

3. The forest certification schemes in brief

The two globally dominant private forest certification schemes are the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC, previously called the Pan European Forest Certification) which is an umbrella organization sponsored by national industry associations and land owner groups.

3.1 The Forest Stewardship Council

The World Wildlife Fund for Nature (WWF), a major global environmental NGO concerned with forest ecosystem health and biodiversity issues, and other major environmental organizations helped launch the FSC in the early 1990s in response to the repeated failure to establish an intergovernmental process for global forest management (Cashore et al., 2004). A founding general assembly meeting was held in Toronto, Canada, in 1993 shortly after the failure of the UN Conference on Sustainable Development (already in 1990, a smaller group in California had coined the name Forest Stewardship Council). The founding assembly meeting was attended by 130 participants from 26 countries. In 1994, the founding members approved a set of principles and criteria for well-managed forests, and a global secretariat was established in Oaxaca, Mexico, reflecting the FSC's intent to address the regulation of forests globally. The WWF played a key role in shaping and supporting the early FSC. From the very beginning, the FSC was conceptualized as an experiment in democratically run private rule-making schemes, as is illustrated by the adoption of highly participatory governance procedures (Meidinger, 1997, 2003; Overdevest, 2004).

The FSC is a global scheme that nevertheless operates on multiple levels. The global FSC principles and criteria can be applied to any forest in the world. However, the global secretariat of the FSC encourages the development of similarly organized national chapters as well as the development of national versions of the global FSC standards adapted to local conditions (Maletz, 2009). Once approved by the global FSC board, these national FSC standards can be used for certification. In addition, some countries also have regional FSC standards (nine in the USA). The first national FSC standard, endorsed by the FSC global board in May 1998, was the Swedish standard, followed by a series of regional standards for Canada and the USA in the years 1999 to 2004. Except for Sweden and Germany, European countries, including Finland (in June 2006), passed their national standards after 2004 (FSC, 2009).

In 2009 FSC international had 833 voting members from 92 countries. It is the members who set and revise the global FSC standards and who elect a global board of nine members charged with carrying out membership-approved business. Other than governments, any person or organization with a self-stated commitment to sustainable forestry and with the support of two members can become a member of FSC. Individuals or organizations that join become voting members of one of the three interest-based chambers—environmental, economic or social. FSC formally balances the vote across chambers (33.3% voting weight for each chamber regardless of how many members join). Within each chamber the voting weight is equally divided between global north and south members. A two-thirds majority is required to change FSC standards or procedures.

FSC's global standards are based on 10 principles, including requirements and criteria for biodiversity, pesticide use, worker rights standards, local and indigenous groups' rights to traditional uses of the forest, etc. (FSC, 2004a). The global principles have shifted somewhat since 1994. A new one was approved in 1996, which allows certification of forest plantations established before the year 1994 (i.e. those pre-dating the FSC). Plantations are highproduction forests under intensive management for high yields. This principle was controversial in the environmental chamber, because it seemed to endorse industrial forestry, which is often associated with ecological degradation, but it won the support of the membership because it was thought necessary to expand the base of FSC acreage and to keep pressure off the worlds' remaining unmanaged forests. Other changes in the FSC since 1995 have enabled more landowners to join or increased the number of marketable products. Between 1997 and 2005 the FSC has changed the labelling guidelines several times to encourage more products to be made from FSC sources (cf. FSC, 2000; FSC, 2004b, c). In 2003 the FSC approved a new policy for small and low-intensity producers which allows for 'streamlined' procedures to make certification on small scale lands economically more feasible.³

FSC requires wood produced from certified forests to be traceable from point of origin to point of sale. Each producer or vendor along the supply chain must be certified as having systems to manage the tracking and separation process ('chain of custody' certification), which is a certification independent of forest management certification (Wingate and McFarlane, 2005).

The FSC requires third-party audits by auditors accredited to the FSC. Landowners must submit to certification audits every 5 years, as well as to annual 'surveillance audits', in order to be allowed to label goods with the FSC trademark. Audits include field and office evaluations and require interviews with local community members. The requirement to publish detailed audit findings on the World Wide Web is meant to guaranty public transparency.

Recent research based on published audit reports by one FSC accredited auditor, Smartwood, indicates that the FSC asked for changes in the following broad areas: management plans (with 94% of certified forests), monitoring (79%), inventory procedures (71%), ecological measures such as special treatment in forests of high conservation value (71%), mapping (68%), chain of custody (68%), maintenance of some forest cover after harvest for ecological and conservation purposes (63% of operations), aquatic and riparian area conservation (62%), threatened species (62%), roads and skid trail (61%), harvest plans (56%), regeneration and reforestation (51%) and non-threatened wildlife (51%) (Newsom *et al.*, 2006). A similar audit study covering Sweden showed that two-thirds of 400 corrective actions requested by FSC auditors required ecological issues to be addressed, a quarter social issues and less than 2% economic issues (Auld *et al.*, 2008). Such a corrective action request is a formal document that details deficiencies and specifies actions that must be taken to achieve compliance with FSC standards.

3.2 The competing schemes

Following the emergence of the FSC, landowner groups in several European countries, the USA and Canada, launched alternative industry schemes, which from 1999 onwards gradually moved under the umbrella of an international organization called PEFC. PEFC began as a European organization but became a truly global umbrella organization for the assessment and mutual recognition of industry-sponsored national forest certification standards after 2003 when it expanded to other continents. Prior to 1999, the PEFC scheme was driven

³While this paper focuses on processes associated with weaker industry schemes adapting to FSC's higher standards, the changes that the FSC underwent in fact suggest a mutual adjustment of schemes (see Cashore *et al.*, 2004; Meidinger, 2008).

largely from the bottom up and has become gradually more like the FSC's structure as a global forest certification scheme governing national initiatives. To understand the linkages between the transnational PECF scheme and local dynamics, it is appropriate to compare the inception and operation of its standards in three different national contexts.

In the USA in 1995, the American Forest & Paper Association (AF&PA), the national industry association representing the US forest industry, launched guidelines of voluntary principles and performance measures and made its acceptance a condition of membership in the AF&PA. In 2009, AF&PA companies claimed to represent 75% of pulp, paper and wood-based building materials production in the USA, while forest products represent 6% of national gross domestic product of the USA.⁴

The 1995 Sustainable Forestry Principles and Implementation Guidelines (SFI) were a fairly unremarkable industry code of conduct. The guidelines consisted of a set of general environmental management principles accompanied by a brief list of voluntary performance metrics. The SFI code included no mandatory elements, but SFI members could publicly claim to be a part of the SFI program (SFI, 1999). Public reporting, third-party monitoring and mandatory performance evaluations were all absent from the 'standards' and were left solely to the discretion of each firm. As such, the code was relatively unelaborated and unaccountable to third parties or external interests. No outside stakeholders, such as environmental groups or non-SFI firms, were participants in code development, oversight, implementation or revision.⁵ The SFI guidelines were implemented independently of the PEFC until December 2005, when PEFC endorsed them and mutual recognition was introduced.⁶

The Swedish PEFC was founded after the small landowners and independent sawmill owners walked out of the national FSC working group process, the rulemaking process for the Swedish national initiative of the FSC. FSC-Sweden's national working group was established on February 15, 1996, to customize FSC principles and criteria to Swedish conditions (Cashore *et al.*, 2004). The working group consisted of the large, vertically integrated corporate owners, small non-industrial landowner groups and mills, as well as the major environmental groups in Sweden, the employers' associations and local indigenous people. Through this balanced standard setting procedure, FSC-Sweden almost set the basis for enrolling most Swedish commercial forestland to the FSC

⁴Accessed at http://www.afandpa.org/about.aspx?id=59, on September 28, 2009.

⁵A copy of the initial standard is on-file with the author.

⁶Accessed at http://www.pefc.org/internet/html/documentation/4_1311_400/4_1208_166/5_1177_456.htm on September 29, 2009.

standards. Prior to consensus endorsement of the standard, however, the small forestland owners and small independent sawmillers walked out and formed a national initiative of the PEFC. According to LRF Skogsagärna, the Swedish federation of forest owners, the FSC consensus process deadlocked over two issues: the high costs of chain of custody requirements for small private sawmills and the envisaged right of Sami people to access private forests with their migrating reindeer (Fern, 2001*d*).⁷

Being no longer under the consensus pressure of joint standard setting with environmental and social NGOs, the Swedish small forest holders and sawmillers crafted a relatively closed standard setting procedure compared with the FSC. For instance, the new guidelines allocated two-thirds of the decision making power to forest sector groups: one-third of the vote to forestry land enterprises, one-third to primary conversion industry (pulp, paper and sawmills) and only one-third to 'other' interests. The PEFC was relatively non-transparent. It did not make audits reports or lists of certified landholdings available to the public. Nor did PEFC auditing include any local consultation or participation. The Swedish PEFC was also weaker than the FSC-Sweden on a number of ecological dimensions (FSC-Sweden, 1998; PEFC-Sweden, 2000).⁸

In the summer of 1996, work on a Finnish standard started (FFCS, 1999). As in Sweden, it originally involved the cooperation of a broad mix of groups and interests, including the major forestland owners and major Finnish environmental groups: representatives from the Finnish Central Union of Agricultural Producers and Forest Owners, the Finnish Forest Industry Federation, the WWF Finland, the Finnish Nature League and the Finnish Association for Nature Conservation. In 1997, a total of 29 members worked for 1 year to develop draft standards that would be compatible with the global FSC (FFCS, 1999; Fern, 2001*e*) and that would work well for Finnish small forest holders (FFCS, 1998; Fern, 2001*e*) who own, comparatively speaking, a very high proportion of forestland in Finland when compared with other developed countries.

Environmental groups, however, felt that the final draft standards were weak and expected that they would be returned from the global FSC secretariat with a request for revisions (Fern, 2001*e*). The landowners and forest industry, after

⁷The Sami people are an indigenous people of northern Norway, Sweden, Russia and Finland. Historically, under Swedish law, they have had protected rights to graze reindeer. At the time of the FSC standard setting, the environmental and social interests in the working group wanted access for the Sami to be assured on FSC certified forests while private landowners challenged this on the grounds that the Sami no longer used traditional methods to herd reindeer (HRC, 2003).

⁸Major ecological differences in the initial FSC and PEFC standards concern the assessment of biodiversity values for forests under 5000 ha, the percent of land set aside for biodiversity protection, and restrictions on ditch digging and chemical fertilizer use (Skogsduvan, 2001).

a year of field-testing and perhaps influenced by the small landowners in Sweden, instead switched course and decided not to support the application to the FSC. Subsequently, the environmental groups withdrew their support for the draft standard (Yrjö-Koskinen *et al.*, 2004), which was then submitted to the PEFC (FFCS, 1999) and endorsed together with the Swedish standard in May 2000. Within 2 years, over 95% of the Finnish forest area was certified according to the PEFC guidelines.

As in Sweden, the Finnish PEFC started out as a relatively weak procedural guideline when compared with that of the FSC. It was not consensus oriented; had no mechanism for regular revisions; did not contain public consultation, audits on the web, or a supply chain tracking system (FFCS, 1999).

However, between 1995 and 2005, SFI in the US and the Swedish and Finnish industry schemes raised their ecological and accountability standards, as did the international PEFC umbrella organization. Since 2003, PEFC international regularly evaluates national standards and procedures of PEFC affiliates, applying a set of minimum standards. They cover standard setting, chain of custody, revision of national standards and pilot testing of standards, conformance with international forest treaties and conventions, among other dimensions (PEFC, 2009). These minimum requirements have increased in number since April 2003.

In the following analysis, I examine factors that motivated members of weaker schemes in three-country contexts to upgrade their standards. While previous research has identified the importance of transnational supply chains and of activist pressure, this paper analyses the previously neglected role of public comparison in the upgrading of industry standards in the competition between FSC and its competitors. The paper explores how national and transnational actors, including civil activists and governments, created important occasions of public comparison and external benchmarking in the USA, Sweden and Finland focusing on the quality of competing environmental standards and forced the different scheme organizations to react to pressures emanating from these comparisons.

4. Methods and cases

In order to evaluate the dynamics of this process, I compare and analyse instances of public comparison which vary in distinctive ways. In two cases, public comparisons in the USA and in Sweden display a competition for a domestic 'winner' between two nationally operating schemes. The third case stems from Finland where external benchmarking, based on the global FSC standards, interfered with a single national industry standard (later, a Finnish FSC was introduced, although the acreage certified remains insignificant). The Finnish case demonstrates how external actors can draw on the existence of a global scheme as long as they can credibly show that benchmarking with such global standards matters for a relevant audience.

The 1995–2005 period is one of high dynamism among private certification schemes in forestry. Five major schemes emerged in the mid-to-late 1990s and consolidated into the two globally dominant schemes by 2005. The period of 1995 through 2005 is also an important analytical timeframe. In this period, many observers expected the NGO-sponsored FSC to be undone because its significantly higher and more prescriptive standards had to compete with those of the industry-sponsored competitors and because these well-resourced competitors launched their schemes with the aim of creating regulatory havens for industry—with weaker standards and more self-control. Since 2005, the schemes have moved forward with much fewer mutual adjustments as both seem to be concentrated on the task of managing significant growth in acreage certified occurring since 1995.

The analysis is based on 75 interviews with forest certification actors: certified forest land owners; supply chain actors including forest processors, timber investment management operations, large end-of-chain retailers; third-party auditors, scheme staff members and NGOs, including those NGOs that sit on governance boards of schemes. Archival research on the published standards, including analysis of the quality and character of competing standards, was conducted in order to understand the way in which actors in the political field constructed issues of the comparative quality of competing schemes and in which they engaged in the politics of those issues. Overall, there was a rich civil society involved in issues of quality comparisons of competing schemes between 1995 and 2005, with over 30 written reports and exposés covering the USA, Sweden and Finland and published by diverse actors such as Greenpeace, World Wildlife Fund, Home Depot, the UK government and the World Bank. Interviews were conducted in person and recorded, with the exception of three telephone interviews.

5. The case narratives

5.1 Public comparison between FSC and SFI in the USA

In the USA, direct targeting of supply chains began when the Rainforest Action Network (RAN) initiated a series of store protests against the world's largest do-it-yourself (DIY) home retailer, Home Depot, accusing it of sourcing wood from 'endangered' old-growth forests. Between 1997 and 1999, RAN activists targeted Home Depot with public protests, letter writing campaigns and monkey-wrenching publicity stunts. In August 1999, after 150 simultaneously orchestrated store protests and coverage in the leading US financial press (Hagerty, 1999*a*, *b*), Arthur Blank, CEO of Home Depot, announced to 'customers, employees, and stockholders' the company's commitment to 'stop selling wood products from environmentally sensitive areas' (Hagerty, 1999*b*). Under the new policy, Home Depot agreed to purchase FSC-certified 'or equivalent' wood. However, the FSC was too poorly established in the USA and Canada, at that time, to supply a large buyer like Home Depot with sufficient quantities of certified wood.⁹ Nevertheless, the Rainforest Action Network ran an ad in the New York Times thanking Home Depot and encouraging its competitors to follow suit or else they would become targets of a 'massive public campaign' (New York Times, 1999). In the next 6 months, other US DIY home retailers like Wickes, Menards, Home Base and Lowes all established 'old growth free policies'; some also calling for producers' wood to be certified (Brooks, 2000).

Subsequently, Home Depot pursued a strategy of working with key suppliers in order to source certified wood in key product lines (Jarvis, 2002). Yet, Home Depot policy had more far-reaching effects than to create demand for FSC certificates in key supply lines. From the perspective of regulatory influence, it prepared fertile ground for strategic comparison politics allowing a variety of actors in the civil regulatory field, NGOs, retailers, competing schemes, ultimately also government procurement offices, to utilize comparisons between industrysponsored and NGO-promoted certification schemes for political purposes. The environmental community, for example, was able to highlight the comparative performance of the FSC schemes as a point of reference from which the relative weakness of competitors' schemes could be criticized (American Lands Alliance, 2000; American Lands, 2001; Fern, 2001a, b; National Wildlife Foundation, 2002; Natural Resources Defense Council, 2002). Such exposés were deployed before important economic audiences-i.e. those that controlled market access: large home retailers such as Home Depot-strategically designed to direct attention to the weaker competing schemes. Public pressure forced weaker schemes to publicly justify their standards vis-à-vis retailers who themselves came under pressure to live up to their commitments to high standards.

This political process unexpectedly created demand by market-relevant communities (i.e. suppliers, buyers, state procurers) for more 'objective' and public forums where the adequacy and legitimacy of the different schemes and standards could be discussed. Civil regulatory parties, retailers and state procurement offices undertook their own comparisons, which induced competitors to upgrade their schemes to look roughly equivalent to the FSC scheme.

For example, as soon as Home Depot had adopted the FSC scheme as a standard, the industry-sponsored SFI scheme began to make claims to Home Depot that its private standards were as sustainable as the FSC standards and should be

⁹Information based on personal communication with Home Depot's lead buyer, Ron Jarvis.

acknowledged as equivalent under the Home Depot purchase policy.¹⁰ In response, the FSC environmental community organized a public benchmarking campaign, distributing scientific-looking public reports in which the FSC scheme was 'rationally' evaluated as superior to the competing scheme. These reports often make point-by-point comparisons, e.g. trying to prove the superior input legitimacy of the FSC schemes, that is, with respect to participatory, transparent, and inclusive standard setting procedures as well as a strong monitoring regime. Similar reports as strategic campaign devices have been produced by NGOs (see, for example, Fern, 2001*a*, *b*, *c*, *d*). Other organizations appear to have repackaged the Fern reports and released them as though they were independent studies arriving at similar conclusions.¹¹ Most of the NGOs that publish reports are members of the FSC environmental chamber, and not 'independent' actors interested in comparing schemes with the aim of rationalizing the debate.

All this put pressure on Home Depot not to accept the SFI scheme as equivalent, and on SFI to address their lack of equivalence. Certainly, Home Depot had to face the problem that the FSC-favouring environmental community would restart the Home Depot campaign if it were to accept the SFI scheme as equivalent without any convincing justification. Home Depot responded by hiring a Washington D.C.-based consultant, the Meridian Institute, to do an 'official' detailed study comparing point-by-point the procedural, substantive and governance standards of the FSC and the SFI schemes. Representatives of each scheme participated in the evaluation in order to arrive at a consensual result. The final Meridian study (Meridian Institute, 2001) provided for a detailed and systematic comparison that addressed topics of the schemes such as origins and objectives, governance, public involvement, auditing, accreditation, funding and use of logos and labels. The Meridian study confirmed significant differences in the procedural and substantive standards of the schemes. From September 1999, when Home Depot announced a preference policy going forward, and within 8 months after the release of the Meridian study in October 2001, the SFI scheme was revised upwards of four times (SFI, 2000, 2001, 2002a, b) while it had been revised only once before. In this period, the SFI scheme became more accountable to external interests, more transparent to broader publics and stricter in terms of monitoring regimes.

There is also evidence of *internal* pressures to make the scheme more transparent, accountable and verifiable, in the period *prior* to the benchmarking exercises of various 'legitimacy communities'. As early as 1997, the internally appointed

¹⁰Information based on personal communication with Home Depot's lead buyer, Ron Jarvis.

¹¹See, for example, the National Wildlife Federation's (2002) *Similarities and Differences FSC and SFI*, the American Lands (2001) *Perspectives on AF&PA's "Sustainable Forestry Initiative" and Forest Certification* or the National Wildlife Society's (2001) *Comparison of Forest Certification Programs.*

'External Review Panel' (ERP), chaired by Paul Hansen of the Isaac Walton League, asked SFI for a survey to help provide information for the review (AF&PA, 1998; Paul Hansen, personal communication). ERP was a panel of non-AF&PA academics, foresters and resource conservationists convened by the AF&PA to evaluate, annually and independently, the progress of SFI and its program since 1995 (AF&PA, 1996, 1997, 1999). Paul Hansen complained that even the Panel did not have enough access to relevant information for its assessment: 'After two years of meeting to evaluate the quality of the annual progress data provided by the SFI program's companies, many Panelists felt that we needed to become more involved and knowledgeable about all levels of the initiative. We were particularly concerned about our ability to develop good information about the quality of the field information being reported. That level of involvement would demand, it was felt, an ability to function more independently as a Panel' (AF&PA, 1998).

SFI initiated an annual survey of firms in order to provide ERP with more data; however, the survey results were not very informative being based on SFI firms' self-reporting and mainly requiring firms just to mark yes/no boxes.¹² In 1997, Paul Hansen again asked the SFI to move towards an independent third-party audit regime. (AF&PA, 1999). Two years later, the year in which Home Depot announced its preference policy, SFI developed 56 indicators for audits and a set of rules to guide these third-party verifications. However, these audits remained voluntary and firms were even free to choose the indicators they wanted to include in the audits (SFI, 1999).

The most important revisions occurred after Home Depot had announced its preference policy and had commissioned the Meridian study. The 2000, 2001, 2002 and 2002 mid-year revisions of the SFI scheme addressed code transparency, governance and verification criteria. At that time, the SFI also adopted its first mandatory criteria and indicators for third-party audits (AF&PA, 2001) and, as a consequence, firms increasingly organized third-party verifications and disclosed audits summaries publicly. In fact, third-party monitoring covered 700 000 acres (1.2% of SFI participants) in 1998 and went up to 77 million in 2002 (68.6% of SFI participants; AF&PA, 2003). Just 3 months after the Meridian study had been completed, the SFI vested independent regulatory authority in a non-profit 501-3C organization. Presumably, to satisfy the equivalency demands, this private regulatory institution balanced governance authority-to set and revise the standards-between major environmental groups, SFI member firms and an 'other' category that comprised state and federal forest officials, environmental and forest academics, small forest owners and loggers, etc. (AF&PA, 2002).

¹²Survey form on file with the author.

5.2 Public comparison between FSC and PEFC in Sweden

In the Swedish case, we see similar direct targeting campaigns along supply chains as in the USA, which cannot surprise, as the same NGO networks were involved in both countries. Ultimately, we see the impact of such public comparisons as motivating the lower performing scheme to become more FSC like. Developments in Sweden have to be analysed in the broader context of NGO campaigning in Europe, where campaigns on sustainable forest sourcing started in the late 1980s and early 1990s. Environmental groups, most notably the Friends of the Earth (FOE), WWF and Greenpeace, targeted end-of-chain retailers including B&Q, the third largest DIY retailer globally, and large German publishing houses such as Springer-Verlag (Murphy and Bendell, 1997; McNichol, 2002). As early as 1985, FOE called for consumer boycotts of retailers in the UK who sold timber from tropical rainforests (Murphy and Bendell, 1997) and, additionally, demanded retailers to prove-e.g. via labels naming the country and supplier of origin-that they would sell or process only wood from well-managed forests (Murphy and Bendell, 1997). As in the USA, in the late 1980s no institutional mechanisms for identifying and tracking the sources of timber from forest to retailer existed. The UK campaigners from WWF and FOE attempted to help identify sources of well-managed wood by publishing 'Good Wood Guides' as early as 1988 (Counsell, 1988), but there were no tracking and labelling models for activists to draw on. Direct targeting culminated when FOE groups and other rainforest campaigners organized protests at over 100 branches of the DIY chains-their slogan: 'Stop the Chainstore Massacres'.

After 3 years of FOE-led protests, WWF announced a policy of partnering with industry in 1991. WWF held 'forest seminars' in boardrooms of big retailers and lobbied for industry's cooperation. They urged retailers to adopt commitments to purchase from sustainable sources. In December 1991, 10 companies, B&Q as the largest among them, agreed to sustainable purchasing, and the first WWF 'buyers' group' ('Group 95') was formed, a group of retailers committed to base their forest trade on demonstrably well-managed sources by 1995. It represented 35% of the wood buying market in the UK at the time (McNichol, 2002). Once the FSC scheme had become operational in 1994, it became the standard of WWF buyers' groups. NGOs targeted not only UK retailers, the WWF had been instrumental in creating similar 'buyers groups' in 17 countries, representing 370 companies, since the early 1990s.

In the US case, at this 'moment' the Home Depot can be seen to have become enmeshed in the politics among competing schemes over claims of environmental quality that emerged. In Europe, the FSC environmental community adopted the strategy of highlighting the poor comparative performance of PEFC schemes with the aim of de-legitimizing PEFC vis-à-vis the broader 'legitimacy communities' (retailers, landowners, policy makers, other NGOs, etc.)—a strategy similar to that pursued in the USA. The main NGO-sponsored reports were the Swedish '*Behind the Logo*' volume (Fern, 2001*d*) and the updated edition covering the PEFC revisions in 2004 (Peter, 2003; see also Fern, 2004). WWF-Sweden produced its own Swedish language version called '*Behind the Scenes*' (Dahl, 2002). The reports made point-by-point comparisons and demonstrated PEFC's poor performance concerning the procedural and substantive elements, transparency, and accountability to broader stakeholders when compared with the FSC schemes.

Similar to developments in the USA, an unexpected consequence of the politics in this sector was the emergence of demands for an additional comparative study that would address the comparative evaluative questions raised by the external benchmarking. But rather than an end-of-chain retailer sponsoring the study, as Home Depot had done in the USA, it was the Swedish forest industry that sponsored a joint evaluative effort concerning the competing schemes.

For example, in the midst of the FSC community's strategic campaign, the Swedish Forest Owners Association suggested a point-by-point comparison called 'Skogsduvan' ('forest dove') to FSC-Sweden's principal supporters (WWF, the Swedish Society for Nature Conservation) and to the PEFC's principal supporters (the Association of Southern Sweden Forest Owners). They agreed and each side appointed a trusted ecologist—Stephan Bleckert for the World Wildlife Fund and Gustav Aulen for the Association of Southern Sweden Forest Owners. These experts examined certification documents, filtered out the differences, and for any difference identified they were charged with revising criteria and standards in a way that would adopt the language of the higher standard. Skogsduvan identified 13 major instances in which the FSC standards were more demanding than the PEFC scheme and four instances in which the opposite was true (Skogsduvan, 2001).

Skogsduvan did not compel schemes to adopt the bridging language, but similar to the US case, the lower performing scheme finally decided to adopt standards comparable with those of the FSC scheme. PEFCs motivation for initiating the Skogsduvan process had multiple sources. As the title of the project indicates ('forest dove') Skogsduvan was an attempt to 'bring peace to the forest'. By adopting an organizational routine to address the issues raised by the NGOs, the PEFC could quell the negative attention which PEFC's lack of equivalence had drawn and send the message to 'legitimacy communities' that they were taking the issue seriously. If successful in this respect, they could potentially unify the Swedish market around a single mutually recognized certification scheme. In the following quotation PEFC-Sweden's co-chair describes the reason for the 'Skogsduvan' process and, also, why PEFC international seems to have been hesitant to adopt FSC-like standards:

We wanted to make it possible to combine both FSC and PEFC and sell it to the buyer as 'Swedish certified' or something like that. So we wanted to find some solution with FSC that would make that possible That was in fact all that was done within Skogsduvan working group-to describe the differences..... It followed from the discussion, decisions within PEFC to accept changes and to change our standard to the same level as the FSC standard. So of course Skogsduvan ... was an important process to redefine the differences and also to reduce the criticism of the Swedish PEFC system. But, it didn't come to combine the two wood flows from FSC and PEFC. So this is what we have been discussing later on, how could that be done, and PEFC has also tried one solution, that PEFC should accept FSC certified unilaterally-so, unilateral recognition of it and see this was a suggestion or proposal from Sweden to [international] PEFC but the board of [international] PEFC has said no to this (Q: Really?) because, yes because they thought it would have some bad impact on other countries.

At the national-level, PEFC-Sweden did respond to NGOs' benchmarking strategies and did attempt to meet buyers' apparent expectations by upwardly harmonizing its standards with those of the FSC. The Swedish case is in many respects similar to the US case. NGOs push the supply chain to opt for products that satisfy FSC standards and simultaneously launch a public information campaign trying to demonstrate the lack of equivalency of competitor schemes. When NGOs succeed in constructing credible expectations, beliefs or ideas that other actors, especially commercial actors in the civil regulatory regime, are concerned about relative quality, competitor schemes developed a preference for ratcheting their standards.

5.3 Public comparison without direct competitor: global pressures on PEFC in Finland

Over 95% of Finnish forest landowners enrolled in the Finnish Forest Certification Scheme FFCS between 1999 and 2001. In this case, between the emergence of the scheme in 1999 and its revision in 2004, we can observe slight declines from a relatively strict ecological standard to a weaker one (TAPIO, 2004).¹³ Yet, in Finland, just as in Sweden and the USA, we see

¹³In particular, changes in the ecological standards include a reduction in the scope of habitats of special importance (key biotopes), weakening of the retention tree standards, reduction in goals for prescribed burning, and old growth retention (TAPIO, 2004).

examples both of activists targeting the supply chain and NGO strategic comparison campaigns. Finnish forest industry firms have been subject to similar market demands from the UK and German retailers as respective firms have been in Sweden. FAO trade data show in fact that Finland is more economically dependent on forest exports to the UK and Germany than Sweden.¹⁴

Finnish and international NGOs have described the Finnish PEFC as a poor performing competitor in comparison with the global FSC standard. Even though there did not exist a national FSC as competitor, they nevertheless apply the strategy of comparisons (Fern, 2001e, 2004). For instance, there has been a Finnish 'Behind the Logo' publication by the Fern organization (Fern, 2001e) and a chapter on Finland in the 2004 version of the 'Behind the Logo' series called 'Footprints in the Forest' (Fern, 2004). In these reports, the methods are similar to those published in other countries in which NGOs have organized campaigns to put pressure on FSC rivals. They try to point out what are, in their views, inadequacies of the Finnish standard and reject it as an acceptable alternative to FSC certification. Greenpeace runs a website dubbed 'PEFC-Watch.org' where it identifies the environmental transgressions of PEFC firms in Finland. It has sponsored an exposé series on Finland called 'Anything Goes? Report on PEFC Certified Finnish Forestry' (Greenpeace, 2001). In 2004 Greenpeace issued a new version of this same type of report closely following the release of the newly revised Finnish PEFC standard called 'Certifying Extinction? An Assessment of the Revised Standards of the Finnish Forest Certification Systems' (Yrjö-Koskinen et al., 2004).

Although Finnish firms have not adopted FSC standards in response to these campaigns, they are aware of the interest of various legitimacy communities in FSC standards. When a spokesman of one of the three major Finnish industrial companies, UPM Kymmene, was asked why major Finnish firms had not responded to the supply chain pressures the same way large Swedish firms had, the answer was that such a decision was up to the Finnish forest landowners. He himself would prefer a harmonization of standards because 60 of his key buyers were asking UPM Kymmene to supply FSC products. The Finnish landowners also recognized the demands but tended to dismiss them and emphasize the quality of their own scheme. For example, when the Finnish PEFC co-chair was asked about German print industries' policies, he replied:

But of course we have to take in consideration their views because they are our customers and we have a very good contacts all the time, and in this case also the environmental organizers want to have influence on

¹⁴The value of Finnish forest product exports to Germany (US dollars;1.89 billion) and the UK (2.12 billion) from Finland were greater than Sweden's German (1.38 billion) and the UK (1.36 billion) exports in 2002. Accessed at http://faostat.fao.org/site/628/default.aspx, on March 27, 2005.

discussions and they are everyday on the doorstep of the printing houses saying 'We know what is best for forests' and, in our democratic system in Finland, it is not possible that only one group which do not have any legal rights to say what is good for the forests, make the policy. It is not right. And the forest owners are, of course—it is wrong if they—if they cannot say what is good for their own forests.

Problem-oriented pressure through supply chains and directly from Finnish NGOs go largely unanswered in the standard scheme revision. Yet, shortly after the Finnish PEFC scheme's 2004 formal revision, an influential legitimacy-providing community did upgrade FFCS standards towards FSC levels, including FSC-like balancing of governance actors, transparency and public consultation standards when the prior NGO and supply chain pressure did not. Just after the formal revision, the government procurement office of the UK announced that it would consider accepting private certification schemes as evidence of sustainability in its new public procurement policy. Facing competing claims and NGOs' benchmarking studies about the relative 'sustainability' of competing forest certification schemes, the UK procurement office devised a public comparative evaluation study that it announced would guide its future purchase decisions. 'The Central Point of Expertise in Timber' (CPET) study, as it was called, was sponsored by the Department for the Environment, Food, and Rural Affairs (DEFRA), the department in charge of developing and implementing the UK government's sustainable timber procurement policy. DEFRA contracted with a consultant, Proforest, to produce a detailed criteria-by-criteria comparison of the schemes based on the most recent set of revisions. Schemes included the FSC, the PEFC, the SFI, the Malaysian Timber Certification Council (MTCC) scheme and Canadian Standards Association (CSA) forest scheme (CPET, 2004). On the basis of this comparison, the UK procurement office concluded that FSC and Canadian standards met the highest level of 'sustainability' requirements. The PEFC scheme failed on three points and the SFI scheme failed on one point. The CPET report allowed the different schemes 6 months from November 2004 onwards to conform to the requirements formulated in the report (CPET, 2005).

PEFC received the assessment on October 18, 2004. In response, it held one General Assembly on October 29, 2004, and a second one on April 11, 2005, 5 months into the CPET deadline. In these two meetings, the PEFC addressed each of CPET's issues. It finally accepted that 'formal approval of standards shall be based on evidence of consensus' (PEFC, 2005, p. 2). It specified that PEFC would 'provide for balanced representation of interest categories', including 'forest owners, forest industry, environmental and social NGOs, trade unions, retailers and other relevant organizations at the national or sub-national level' (PEFC, 2005, p. 2). Also regarding requirements for consultation with external

stakeholders, the PEFC adopted an FSC-like standard: 'The audit evidence to determine the conformity with the forest management standard shall include relevant information from external parties (e.g. government agencies, community groups, conservations organizations, etc.) as appropriate' (PEFC, 2005, p. 3). Furthermore, the PEFC agreed to a publicly available certification report summary. In turn, the CPET accepted the PEFC scheme as legal and as applying sustainability standards and it announced plans to re-evaluate the scheme routinely; thus, setting in motion a procedure of future public comparisons and of establishing a potential source of commensurate pressure, which may help to keep standards up over time (CPET, 2006).

In the Finnish case, NGOs pushed the supply chain to adopt FSC-oriented products. NGOs unleashed campaigns showing FFCS's lack of comparative adequacy. Yet, demands are ignored until a powerful public supply chain actor responded by creating its own evaluation, demonstrating that the FFCS was a relatively poor performer, particularly with respect to its procedural standards.

6. Discussion

This paper has outlined the role and importance of public comparisons and NGObased benchmarking procedures and provides an alternative account of upgrading processes with respect to forestry standards to those accounts which focus mainly on supply chains and direct action. The environmental community used environmental benchmarking and the strategy of highlighting the comparative performance of the FSC scheme as a point of reference from which to criticize the legitimacy of competing schemes. Strategic public comparisons were addressed to important economic audiences, i.e. those that controlled market access: large retailers such as Home Depot in the USA, B&Q in the UK and also large book and magazine publishers such as Time-Warner and Random House. These strategic comparisons were designed to draw publicity and delegitimize competing schemes. In the process of doing and publishing public comparisons, weaker certification schemes were put under pressure to publicly justify their standards to retailers at the same time as retailers and public purchasers came under pressure to live up to their commitment to high standards.

A consequence of this politics was to create demands by the respective 'legitimacy communities' for more 'objective' public comparisons that would resolve the debate about whose standards were higher. Thus, in these cases benchmarking appears to set up a variety of evaluation routines, creating pressures and opportunities for change beyond the original act of substantive benchmarking itself. In these cases where retailers, state procurement offices and industry undertook their own comparisons for assessing the quality of written criteria and standards and found significant differences in quality, competitor schemes ratcheted up to gain legitimacy as at least roughly *equivalent* to the FSC scheme, although none has reached complete parity with the FSC. In this way, the capacity to produce organizational change from external benchmarking results appears to depend on creating credible expectations that an influential actor in the broader field cares about the benchmarked practices.

These findings have implications for law and legitimacy. In the forest sector, the emergence of private forest standard setting, monitoring and labelling schemes seems to have motivated and empowered a wide variety of actors— NGOs, states and retailers—to compare and contrast the social and environmental standards of different schemes directly. These cases also show that a variety of civil society groups took advantage of the publicly available information to substantiate their benchmarking critiques. Yet, publicly available information that may enable civil society to systematically compare social and environmental performance of private actors, i.e. firms, is not always available. Public policies which foster transparency may help to strengthen civil society capacity and allow for a closer monitoring of private regulation. To this end, law has an important and basic role to play in obliging information about performance to become public.

The cases also highlight the continuing power of the state as a legitimizer, public monitor of private standards, and influential buyer. For instance, the UK procurement office's support for benchmarking private certification schemes was an important source of public support for higher quality civil society regulation, as was its influence as a key buyer.

Several caveats also apply. The period under study was characterized by rapid growth in the diffusion of standards and a sustained upward pressure on industry schemes. Without continued public or civil society pressure and external monitoring, it is not clear that standards continue to improve. Furthermore, since 2005, the PEFC has expanded its acreage impressively as large-scale industrial forest companies in the USA and Canada joined under its umbrella. In 2009, PEFC represents 225 million ha in 19 countries.¹⁵ The FSC, in comparison, has enrolled 115 million ha in 82 countries.¹⁶ The increased acreage of the PEFC might be a result, among other factors, of ratcheting up the standards and of gaining legitimacy in the forest certification community and in the forest industry. At the same time, increasing acreages

¹⁵Over one-half of PEFC's certified acreage is in Canada (122 million ha) and the second and third largest countries with PEFC certified acreage are the USA (34 million ha) and Finland (21 million ha), accessed at http://register.pefc.cz/statistics.asp on September 28, 2009.

¹⁶The country with the most FSC certified forests is Canada (28 million ha), followed by Russia (20 million ha), the USA (12 million ha) and Sweden (10 million ha), accessed at http://www.fsc.org/ppt_graphs.html?&no_cache=1&dlpath=facts_figures on September 28, 2009.

might also make it more difficult for the FSC to enrol more forests and develop market power for its own label.

It is important to note that the comparison and benchmarking of competing schemes by legitimacy communities, as analysed in this paper, has focused on the quality of *written* schemes as opposed to a comparison of the implementation and impact of these schemes, i.e. their effectiveness in solving forest sustainability problems. Focusing more on the practical performance of forest schemes and benchmarking those performances should be an important future strategy for comparatively assessing the legitimacy of both the FSC and its competing schemes as they are developed in the future. To date, however, few legitimacy communities from NGOs to industry to governments to academics seem to focus systematically on evaluating implementation and impact across schemes and assessing their 'output legitimacy'. This is probably in part due to the difficulty to obtain systematic data on practical performance when compared with the ease of comparing criteria and standards on paper. Our findings, however, reinforce the need to focus on the benchmarking and comparison of actual performance. In theory, information gleaned by auditors could provide a so far untapped resource for the development of environmental performance benchmarks. Schemes might be able to improve their legitimacy-standing by demonstrating the performance improvements of their own against competing schemes. And, as a consequence, governments, civil society and academics might be able to benchmark performance externally, thereby increasing public oversight over 'private' regulation. Given the continuing contentious relationship between FSC and the PEFC, attempts to generate such new comparisons are likely to emerge as a result of the existing competition dynamics.

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