

# **Forest Certification in Estonia**

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## **ABSTRACT**

The aim of present case study is to provide an overview of the process and effects of forest certification in Estonia. The discussion over forest certification was initiated in Estonia in mid-nineties as environmental NGOs started to highlight the potential benefits of certification. The issue was discussed further in the working groups of the National Forest Development Program, bringing the issue to the attention of a broader range of institutions, officials and stakeholders. Since 1998 the work with forest certification has been more organized, due to the official establishment of the National Working Group on Forest Certification. Shortly after establishment of the working group it was decided that the national principles on sustainable forestry would be developed according to Forestry Stewardship Council (FSC) principles and criteria. The main areas of dispute in the working group were requirements for forest management plan, establishment of drainage systems in the forest, and use of chemicals, pesticides and exotic species. A draft version of the national standard was approved in 2000. Since then, the national working group has been also official Estonian FSC working group. One major breakthrough since then was the certification of all state-owned forests in 2002, covering roughly 1 million ha, 20% of Estonia's total area and 40% of its forested land. Certification of state-owned forests has gradually changed Estonian forestry practices. According to questionnaires, its main effects have been the increased participation of stakeholders, increased social security and safety level of forest workers, and forest management that is "closer to nature." Certification of such a significant forest area has also enabled chain-of-custody certification to begin.

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## I. INTRODUCTION

This paper describes forest certification in Estonia. Its main focus is the Forest Stewardship Council's (FSC) forest certification program, under which the entire Estonian state forest (almost 1 million ha) has been certified. This program has significantly impacted many aspects of Estonian forestry. The other certification scheme discussed is the Pan-European Forest Certification program (PEFC). Since none of Estonia's forests or industries have yet been certified according to the PEFC program, this paper discusses only the emergence of the PEFC working group and its developments so far.

Since Estonia regained independence in 1991, FSC certification has proven to be one of the most successful measures for regulating the country's state forestry sector. Since the introduction of Estonia's neo-liberal policies, forestry regulation has been minimal (Estonian Forest Code 1998); up to 50% the volume of felled timber may have been harvested illegally (Ahas et al. 2002; Hain 2003). At the same time, FSC certification of state forests, which cover approximately 40% of the country's forested area, has improved the quality and transparency of forest management (Eesti Keskkonnaühenduste Koda 2002). According to NGO claims and public opinion, FSC certification has helped to overcome the problem of poor forestry regulation that developed in the post-Soviet years. While the exact nature and results of FSC certification are arguable, certification in general has most certainly promoted environmental protection, labor health and sound sustainable resource management in Estonia (Lillemets 2004). Furthermore, FSC certification has also helped to initiate discussions among target groups within the forestry sector and has brought about many new ideas.

Both the Estonian sustainable forestry standard and national FSC standard draft have introduced a new concept - *Spring truce* - previously unknown in FSC criteria. It bans forest work during animals' breeding season (spring and summer) to allow them to pup or nest undisturbed. This principle was brought to the working group by Estonian Ornithological Society, the Estonian member of BirdLife International.

FSC has also brought up the need to rethink what is "good common practice" in forest management. Foresters began to forget their basic ethics during Estonia's years of wild capitalism. The national working group on forest certification, which was based on FSC principles, re-established the ethics while the State Forest Management Center (RMK) implemented them in practice through FSC certification.

This paper summarizes the development and impact of forest certification in Estonia. For this purpose, materials since 1995 have been analyzed, and protocols of certification meetings studied. Questionnaires regarding the effects of forest certification were sent to 28 individuals who represent different stakeholder groups and institutions related to forest certification. Eleven completed questionnaires were received. To gather additional information and fill informational gaps, interviews were carried out with following people: Jaanus Aun, board member of the Private Forest Centre; Peter Feilberg,

CEO of NEPCon Estonia; Kristjan Tõnisson, managing director of NEPCon Estonia; Ulvar Kaubi, marketing manager of State Forest Management Center (RMK); Tanel Renser, environmental manager of the State Forest Management Center (RMK); Rainer Kuuba, coordinator of the Estonian FSC working group; Olev Lillemets, environmental manager of State Forest Management Center (RMK); Ahto Oja, project coordinator of the Estonian Institute of Sustainable Development (SEIT); Kalle Põld, director of Private Forest Center and representative of the Estonian PEFC working group; Andres Taliäär, managing director of the Estonian Forest Industries Association (EMTL); Toomas Trapido, director of Estonian Fund for Nature; representatives of three timber industry companies.

Based on the feedback and information gathered, generalizations were made and conclusions drawn. Where information presented by different parties varied significantly, both opinions have been presented. Specific personal references have been provided where appropriate; statements without references reflect the opinion of a majority of our informants. In very few cases, the person interviewed wished to remain anonymous. In those cases, the only reference listed is “interview.”

The authors are grateful to the respondents and persons interviewed and also to others assisting with the research. Special thanks go to members of the national FSC working group and to the employees of NEPCon, RMK and Baltic Connexions.

## **II. BACKGROUND FACTORS**

### **Political framework**

The Estonian political landscape has been rather one-sided since regaining independence in 1991, as neo-liberal, right-wing parties have continued to govern. The government has helped to establish legislation regarding the political system, economy and private property. Unfortunately, it has paid little attention to environmental and natural resource issues (Tallinn Pedagogical University 2003). Neither of the political parties most active in the Ministry of Environment, which is responsible for development of the forestry sector, has provided the kind of public leadership that would most effectively care for the forest and environment (Kultuur ja Elu 2004).

The parties involved are Rahvaliid (People's Union), representing the rural population, and Reformierakond (Reform Party), representing big businesses. Since gaining power in 1998, Reformierakond has advocated for liberal forest regulations that would support economic growth during hard times in rural areas. This political stance has led to a loss of regulations, the extensive spread of illegal forestry, and unsustainable over-logging (Ahas 2003). After the 2003 elections, however, the Rahvaliid party declared a need to limit forest use and destruction (Ministry of Environment 2003). Observers in NGOs suggest, however, that the steps taken by Rahvaliid have been insufficient to stop the uncontrolled use of forest resources (EGM 2004).

A number of changes occurred in the forestry sector after Estonia regained independence in 1991. Most significantly, the forest lands which were privately owned

during the former Estonian Republic (1918-1940) were returned to descendants of their historical owners. With the establishment and increase of private forest property came the swift growth of the timber industry. Furthermore, the Soviet structure for forestry administration was no longer functional; the government and state forestry department could no longer control forestry effectively (Ahas 2003). Harvesting rates (Figure 1), illegal logging, and timber-related tax fraud increased uncontrollably during the mid-1990s (Hain 2003). The need for fundamental changes in forestry administration and policy became ever more apparent. To solve these problems, the Ministry of Environment, with support from the Finnish government, launched a Forestry Development Programme (FDP) in 1995. This effort resulted in the parliamentary approval of the Estonian National Forest Policy on June 11, 1997 (FDP 1997; Kallas 2002). The FDP recognizes the importance of sustainable forest management and also sets development of forest certification as one of Estonia's goals. This was one of the three initial factors that helped FSC-based certification to emerge in Estonia (see section III) (Tonisson 2000).

Approval of the Forest Policy led to the 1999 Forest Act, which fundamentally restructured public forestry administration (Kallas 2002) and ultimately enabled forest certification to become a reality in Estonia. Both policy documents clearly state that the normative functions of state forests should be separated from their practical management (FDP 1997; Forest Act 1998). Towards this end, the State Forest Management Center (RMK) was established in 1999. Understanding RMK's functions and status is important because this institution is Estonia's only certified forest manager, aside from one private owner. RMK was the first (and so far only) government-owned profit-making institution in Estonia. Thus RMK took on practical forest management and profit-making, while the forestry department within the Ministry of Environment retained control over policy-making, supervision, and law enforcement. Since 1998 the Ministry of Environment's forestry department has had a limited structure (with less than 10 employees) and limited power. Its support for forest certification had more direct and indirect impact during the period of 1998-2000.

### **Forest resources and ownership**

According to the 2002 National Forest Inventory, the total forest land in Estonia is approximately 2.2 million hectares, or 50.5% of the country's area. Of this, roughly 3% is continually regenerating or being felled, and is not actually covered with forest (EFSC 2003). The state owns approximately 40% of total forest land and manages it via the aforementioned State Forest Management Organization (RMK). Another 36% of the forests are registered private forests. The remaining forests are not yet privatized or taken by restitution by descendants of historical owners, but will likely be privatized in the near future (Table 1). There are no official statistics about further divisions of private forest ownership, i.e. between industrial companies and small landowners. However, it is estimated that approximately 30-40% of privatized forests belong to forestry companies (Valgepea 2004). The total population of Estonia is below 1.4 million people (SOE 2004).

**Table 1.** Forest area (ha) and ownership structure

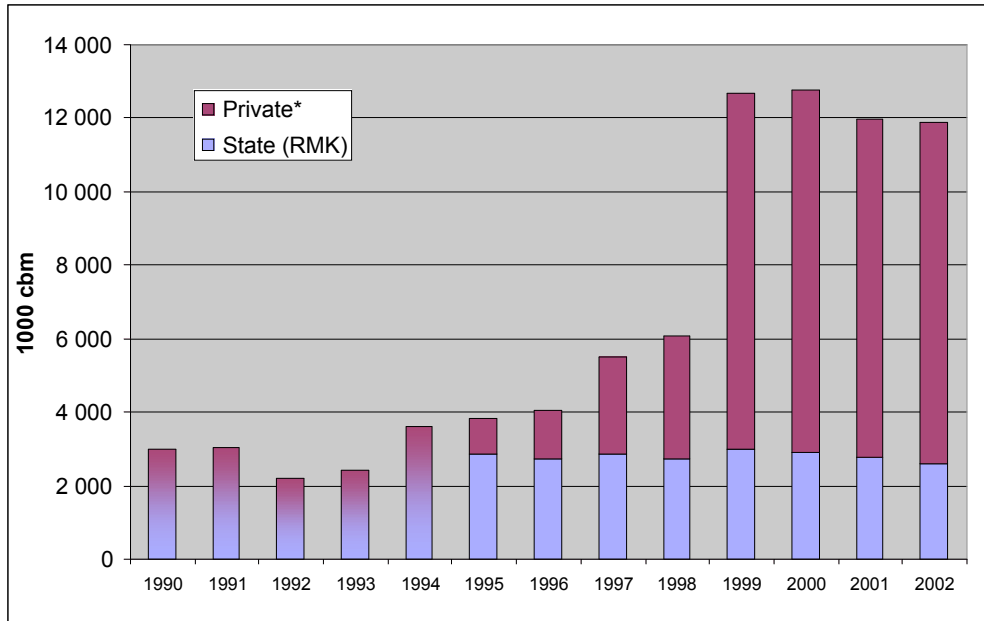
|              | Total forest area | Commercial forest | Forests with management limitations |
|--------------|-------------------|-------------------|-------------------------------------|
| State (RMK)  | 834 200           | 603 800           | 230 400                             |
| Private      | 795 570           | 1 109 900         | 261 700                             |
| Other*       | 576 030           |                   |                                     |
| <b>Total</b> | <b>2 205 800</b>  | <b>1 713 700</b>  | <b>492 100</b>                      |

\*The category represents forest lands which are planned to be restituted or privatized in near future. RMK is presently legally representing the owner of such areas.

Sources: EFSC 2003, Land Board 2004

A significant characteristic of private forest property in Estonia is the extreme fragmentation of forest ownership. Forests smaller than 10 ha compose 43% of the forest area registered by the Land Board and 80% of its total listings (Yearbook 2001). The fact that average forest size is very small makes relative certification cost (price per hectare) high for private forest owners (Feilberg 2004). Furthermore, continuous forest management is not possible or feasible on such small areas. These are some of the main reasons that forest certification has not been achieved by most private forest owners (Feilberg 2004).

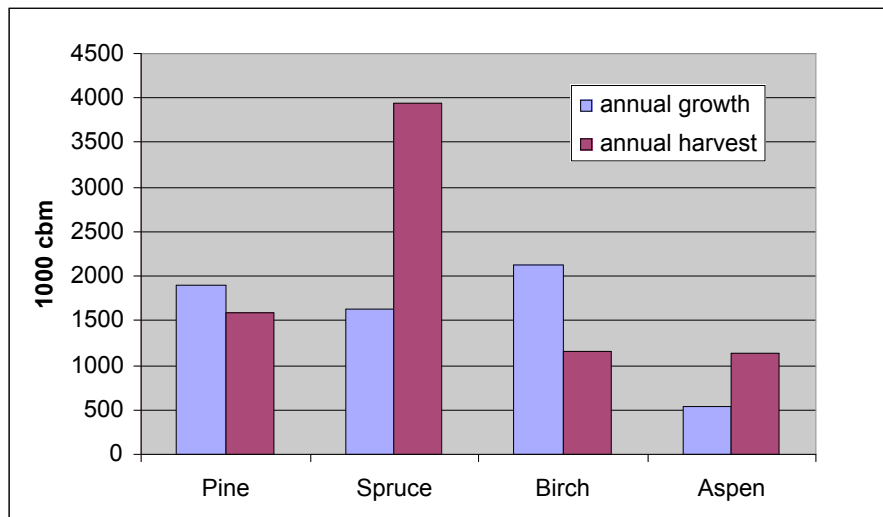
Currently no system regulates the amount of felling or felling division by species in private forests because of liberal forest policy (Hain 2003). Therefore all forest owners can manage their forests freely, according to their own best judgment. This has led to unprecedented harvesting levels in private forests (Figure 1), where harvest levels greatly exceed annual growth for some species (Figure 2). The Forest Act, as decreed by the Ministry of Environment, is the legal framework that regulates harvesting. It provides guidelines for appropriate harvesting based on stand features such as basal diameter and canopy cover. The liberal political framework is another underlying reason for the lack of certification in private forests, since fulfilling certification requirements would severely limit owners' ability to carry out felling beyond sustainable limits (Feilberg 2004). Most forest owners and businesses seek quick profit and short-term benefits to alleviate the high unemployment rates and extensive social problems in rural areas (Ahas 1999).



**Figure 1.** Annual felling volumes in Estonia 1990-2002

\*From 1999 to 2002 the felling volumes are given according to NFI data. The division of felling volume between state and private sector is not known before 1995.

Sources: Yearbook 2001; Yearbook 2002; EFSC 2001; EFSC 2003; RMK 2002; RMK 2003



**Figure 2.** Estimated annual growth and harvest rate for selected species

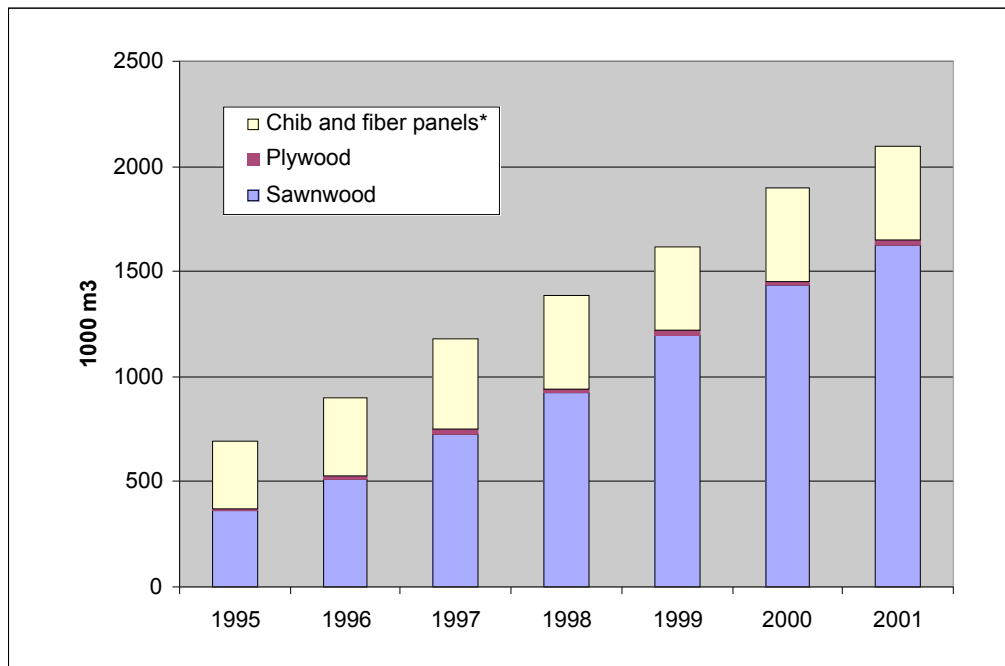
Source: EFSC 2003

## Markets

One of the key players in the Estonian timber industry is Estonian Forest Industries Association (EMTL), a very strong voice in national discussions on forestry and forest policy. EMTL's main interest is to promote the economic growth of the timber industry sector, and it therefore lobbies strongly for higher felling volumes. It has strongly opposed some restrictions enforced in state forests due to FSC certification, such

as establishing the “spring truce” (EMTL 2003). EMTL has also strongly impacted the development of forest certification in Estonia, especially regarding PEFC. Although EMTL’s attitude towards forest certification is generally positive, it has most directly supported the PEFC standard and sustained its working group in Estonia. EMTL has provided direct financial support to the PEFC working group, and its representatives have been actively involved in developing PEFC standards (Taliäär 2004).

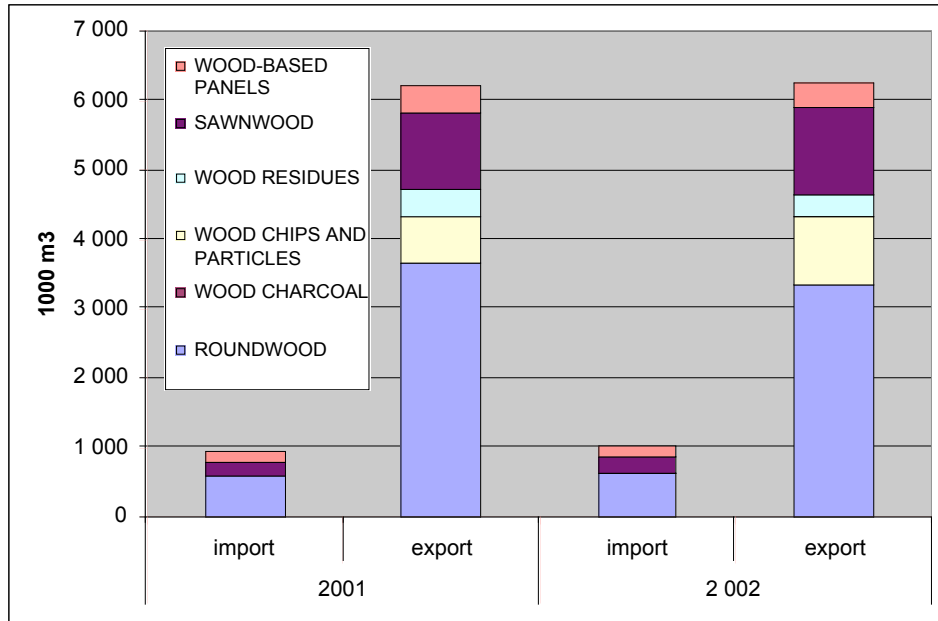
The timber industry is the second largest industry sector in Estonia after food production, and accounted for 14% of the manufacturing sector’s total production in 2002 (SOE 2002). Along with increased harvesting and a growing industry in general, production volumes have risen steadily for all major timber product groups (Figure 3).



**Figure 3.** Manufacturing of main wood products in 1995-2001

\* Fiber products have been recalculated from m2 to m3 by using average thickness of 15 mm per fiber plate.

Source: SOE database 2004



**Figure 4.** Structure of import and export of major timber product groups in 2001 and 2002.

Source: SOE database 2004

Comparing figures 3 and 4 provides a general picture of domestic timber processing and imports and exports. Although the share of domestic processing of roundwood has increased, the majority of exports still consist of roundwood. Roundwood exports consist almost entirely of pulpwood (Valgepea 2004), which is exported mainly to Scandinavian countries (SOE database 2004). The rapid increases in felling volumes during the past decade (Figure 1) have been matched by increased production capacity of local sawmills. However, since a major part of local raw material is exported as pulpwood, the sawmills do not have a sufficient domestic roundwood supply and are forced to import substantial quantities of logs from Russia (Table 2). This has led to increased roundwood prices and a deficiency of raw material for sawmills and secondary processors. These developments have negatively affected chain of custody certification, since it is difficult to assure consistent supplies of certified inputs (Feilberg 2004).

A major pulp mill will open in Kunda in late 2005, which will increase logging and import of aspen wood as well as export of pulp. During the pulp mill's initial environmental impact assessment, national NGOs were able to force its developer to require that the aspen's origins be verified, and ensure it has been legally cut. The company also agreed to ensure, within 3 years of opening the mill, that at least 50% of its annual inputs originated in FSC-certified forests (ELF 2003). This agreement will likely increase private forest owners' motivation to certify their forests.

**Table 2.** Main Estonian trade partners for timber and timber products in 2002 (million EUR)

|         | <b>import</b> | <b>export</b> |
|---------|---------------|---------------|
| Finland | 18,3          | 99,2          |
| Germany | 8,0           | 62,0          |
| Russia  | 57,4          | 7,0           |
| Sweden  | 4,4           | 89,4          |
| UK      | 0,2           | 71,4          |

Source: SOE database 2000

### III. THE EMERGENCE OF FOREST CERTIFICATION

#### Initial support

Our analyses showed that the emergence and development of forest certification in Estonia were supported by following key actors and events:

- a. Active support of international environmental NGOs and their partners in Estonia;
- b. Desire for alternative policies by the creators of national forest policy (Tonisson 2000);
- c. Dissatisfaction amongst national environmental NGOs about prevailing liberal forest policy, and their consequent search for non-state market mechanisms;
- d. Ongoing certification discussions from neighboring countries (Oja 2001);
- e. Emerging markets and demands for FSC products.

The idea for forest certification emerged in 1995 as the Estonian Green Movement–FoE (ERL) began studying and promoting FSC certification (Oja 2002). NGOs first began meeting to discuss certification issues in 1996 and 1997. ERL cooperated closely with the Taiga Rescue Network (TRN), which had been active in FSC certification issues when TRN’s coordinator Karin Lindahl was on the FSC Board. From 1997 on, another major environmental NGO, the Estonian Fund for Nature (ELF), became involved as well, as did other NGOs. In 1998, ERL became the first Estonian member of FSC International, widening its contacts and credibility. Several years later ELF and Ahto Oja, as an individual member, also joined FSC.

One of the indirect causes of NGOs’ support for the FSC was the Ministry of Environment’s stiff, undemocratic approach to forest policy development (Kultuur ja Elu 2004). NGOs became especially uncomfortable with the state’s approach during the creation of the Estonian Forestry Development Programme in 1996-1998 (Kallas 2002; EFDP 1998). Their critique of the government’s forest policies was very visible in the media in 1996-7, and made the Ministry of Environment less eager to cooperate with them. Their isolation from the Ministry caused NGOs to concentrate on developing independent regulations, including FSC. International donors and environmental NGOs have supported their efforts with both ideas and funds; indeed, Estonia’s environmental NGOs have been funded primarily by foreign donors throughout the past dozen years.

Only in 2004 did the Estonian government approve financing for an NGO-led project promoting FSC certification.

What emerged from the controversial Estonian Forestry Development Programme in 1997 was a neo-liberal forest policy that caused unscrutinized logging and more instances of illegal forestry and related tax fraud. Forest management plans and licenses were no longer mandatory for logging, leading to uncontrolled forestry and a dramatic increase in felling. For five years, forest logging has exceeded annual growth (Ahas 1999; Ahas 2003; Ahas and Hain 2003). Some officials have sought alternatives to these policies, however. The Forestry Department at the Ministry of Environment started studying certification issues in 1998. In 1998 and 1999 the State Forestry Department financed studies of certification principles and analyses of the draft Estonian Sustainable Forestry Standard. In the following years both direct and indirect support grew among active officials who were looking for new policies and alternatives to traditional forest policy.

Trade unions and similar organizations are relatively weak and unorganized in Estonia, and employers still have a wide range of opportunities to fire their workers. In RMK, for instance, many people have been laid off since 1998 due to large-scale consolidations. In several cases, foresters or workers lost their jobs after making critical comments about the institution (Kuuba 2004). This may be one reason that trade organizations do not use FSC certification to its fullest extent.

#### *National Working Group on Forest Certification (NWGFC)*

NWGFC was formed in November 1998 by thirty interested organizations and individuals whose goal it was to create an Estonian sustainable forestry standard (Tonisson 2000). Forestry background environmentalist Mr Ahto Oja from the Stockholm Environment Institute Tallinn branch (SEI-T) was appointed as coordinator. In spring 1999, the working group decided to take FSC principles and criteria as the basis for their work. Many forestry experts took part in its discussions. A representative of the Danish FSC working group, Peter Feilberg, served as a foreign consultant, assessing the certification standard. In December 1999, the group approved a draft sustainable forestry standard; in the following year it discussed, tested, and modified that draft.

The Estonian NWGFC was originally oriented to the FSC standard and certification because of active environmental NGOs and the momentum behind the FSC globally. In 2000, the idea of Pan-European Forest Certification (PEFC) was introduced to NWGFC by some working group members and Finnish consultants. The working group spent much of that year debating the principles and strategies of FSC versus those of PEFC. These discussions remained fairly hypothetical, since no one in the working group had practical experiences with FSC or PEFC. Eventually these discussions led to a split between members. FSC was supported primarily by NGOs and RMK, and PEFC by industries and forest scientists. NWGFC therefore divided into two separate groups, as described below.

Despite this division, NWGFC's sustainable forestry standard was approved in December 2000 by 23 organizations and individuals<sup>1</sup>. At this time, it was also decided that while the NWGFC standard would remain as a basis, both FSC and PEFC could be developed further. A discussion ensued about whether FSC or PEFC standards could be lower than NWGFC's, but it was not fruitful.

*Estonian FSC working group*

Although NWGFC was established in 1998 primarily to develop FSC in Estonia, the specific FSC working group was not launched until October 2000 by 11 groups and individuals (Table 3). In September 2001 FSC International presented provisional conditions for accepting the national working group. Because of other sensitive themes in forestry (new regulation, illegal logging) the progress of the FSC working group in 2001-2003 was very slow, and the provisional conditions were not met. Furthermore lack of motivation and strong coordination hindered the activities of the FSC working group and slowed overall progress. In 2004 the activity level of the working group rose and the conditions were met. In May 2004 official confirmation was received from FSC headquarters that the Estonian National Working group had been approved and the contract formulation had been initiated. As of May 2004 the FSC working group has 17 members in 3 chambers (Table 4).

**Table 3.** Representatives in the Estonian FSC working group and their division by chambers. Five individuals joined after the group's first meeting on 10/27/00.

| <b>October 2000</b>                                  | <b>February 2004</b>                                 |
|------------------------------------------------------|------------------------------------------------------|
| <i><b>Environmental chamber</b></i>                  | <i><b>Environmental chamber</b></i>                  |
| Estonian Green Movement-FoE – NGO* /R. Ahas/         | Estonian Green Movement-FoE – NGO*/R. Ahas/          |
| State Forest Management Centre – Gov. /O. Lillemets/ | Estonian Fond For Nature – NGO*/R. Kuuba/            |
| Mr Rainer Kuuba                                      | Mr Ahto Oja*                                         |
|                                                      |                                                      |
| <i><b>Economic Chamber</b></i>                       | <i><b>Economic Chamber</b></i>                       |
| Estonian Fond For Nature – NGO* /T. Trapido/         | Baltic Connexions – company /K. Vene                 |
| Baltic Connexions – company /K. Vene/                | Sirje – company /                                    |
| Mr. Lembit Maamets                                   | Estonian Forest Survey Centre – company /L. Maamets/ |
| Mr. I. Tust                                          | NEPCon <sup>#</sup>                                  |
| Ms. E. Rebane                                        | Metsaekspert – company / P. Põntson/                 |

<sup>1</sup> Estonian text, [www.agenda21.ee/metsandus/esms12122000.html](http://www.agenda21.ee/metsandus/esms12122000.html)

|                              |                                                                |
|------------------------------|----------------------------------------------------------------|
|                              | Mr Peep Põntson                                                |
|                              | Mr Lembit Laks                                                 |
|                              | Mr Peeter Muiste                                               |
|                              | Mr Lembit Maamets                                              |
|                              |                                                                |
| <b><i>Social Chamber</i></b> | <b><i>Social Chamber</i></b>                                   |
| Mr Ahto Oja*                 | Tartu Student Nature Protection Circle – NGO /K. Podmoshenski/ |
| Mr Kristjan Tõnisson*        | Võro Selts VKKF – NGO /                                        |
| Mr. Toomas Krevald           | Mr. Veiko Belials                                              |
|                              | Mr. Indrek Tust                                                |
|                              | Mrs. Heli Kiigemägi                                            |

\* Member of FSC

# NEPCon is FSC member as a Danish non-profit organisation (the headquarters of NEPCon is located in Denmark)

The FSC's biggest success has been reached in certifying the forests. The State Forest Management Centre (RMK), which manages 40% of all Estonian forest (equal to some 20% of Estonia's land), initiated development of the internal environmental management system in 1998. By 2000 RMK had reached the point where their EMS was ready for independent verification according to the ISO 14 001 requirements. Due to suggestions by Estonia's largest NGOs, in particular the Estonian Fund for Nature, RMK started to consider the possibility of certifying the forest management system concurrently with the EMS certification under ISO. The director general of RMK, at that time Andres Onemar, and the whole board, were supportive towards the idea of joint FSC - ISO 14001 certification. When a joint proposal was received from BVQI and SmartWood it was unanimously decided to try for both certificates (Lillemets 2004). AT that time, the PEFC working group was not yet active in Estonia, and no discussion of the merits of PEFC versus FSC was taking place (Lillemets 2004). Certification was carried out by NEPCon<sup>2</sup>, who is the regional representative of the FSC accredited certification body SmartWood in Eastern Europe, Russia and Scandinavia. In 2000 NEPCon certified the first forest in Baltic countries: about 300 ha of private forest. Certification of all Estonian state forest followed shortly in 2002 (Tonisson 2004). These were initial steps in development of FSC certification in Baltic region.

Development of Chain of Custody certification, however, has been slow in Estonia. By 2004 a total 2 FSC forestry certificates and 10 active FSC chain of custody certificates (CoC) have been issued in Estonia. Two CoC certificates were voluntarily stopped in 2004 due to a shortage of certified raw material, and 2 CoC certificates were suspended due to violations of CoC requirements (Tonisson 2004). For comparison, in Latvia 69 CoC certificates have been issued as of March 2004 (FSC 2004).

<sup>2</sup> NEPCon (Nature, Ecology and People Consult) is a non-profit company who has been actively involved in FSC certification in Baltics since 1999, when a contract was made with FSC accredited certifier SmartWood (Feilberg 2004).

### *Estonian PEFC working group*

The idea of PEFC was introduced in Estonia in 1999, by some representatives of forest industries, Finnish consultants and the Forest Owners Association. In 2001, the PEFC was rediscovered by some activists in RMK and forest industries as a possible alternative to the FSC. Those interested in developing the PEFC contended that it is important to have different certification schemes present in the NWGFC and in the marketplace. Beginning in 2002, the PEFC working group has also attracted members of Estonian Forest Industries Association and forestry engineers from the Estonian Agricultural University. As of April 2004 the Estonian PEFC working group has nearly finished elaborating the documentation for the local Estonian PEFC certification scheme, including the forest management standard, chain of custody standard and a few other additional documents. The scheme however has not yet been approved by the PEFC Council; thus certification according to PEFC rules is still not possible in Estonia (Põld 2004). Activities of the Estonian PEFC initiative and working group have been financially supported by multiple sources including Finish timber companies, Estonian Forest Industries Association (EMTL), Estonian Ministry of Agriculture and other voluntary supporters (Põld 2004).

### **Institutional design**

Both the national working group on forest certification (NWGFC) and FSC working group have been structured according to the FSC scheme, with environmental, economic and social chambers. Decision making has mainly consisted of consensus in the NWGFC, while in a few cases majority vote has been used. Although most problematic issues, such as protection versus management, or the spring truce, were discussed earnestly in the NWGFC, consensus was eventually reached (Oja and Aitsam 2001).

The Estonian FSC working group had 17 members in February 2004 and in its discussions a typical FSC system of environmental, economic and social chamber is used. For voting a share of votes between chambers is monitored; however as mentioned the voting has only been used in rare cases when consensus has not been achieved. Voting by chambers has been used in cases of elections, approval of reports and a few organizational issues. The Estonian PEFC working group consists of 18 members. In voting a simple majority is used although for the majority of decisions consensus is achieved.

Discussion within certification working groups has enhanced the development of democratic procedures and practices in Estonia. Most importantly, procedures for joint action have been established. Formerly, different stakeholders had confronted each other instead of having open discussions. There has been strong push for cooperation in order to achieve joint goals and reach consensus in certification working groups. It has taken lot of effort to establish respectful procedures for meaningful communication. Through the discussions, the need to balance different interests has become evident to all participants.

## **Standards**

In the first stage of the certification discussions the FSC principles and criteria were taken as basis for Estonian national working group on forest certification (NWGFC) standard (Oja 2001). NWGFC developed the standard over several years with very intensive discussions. Main discussion themes were: the requirements for forest management plan, the concept of spring truce, forest amelioration, introduced exotic species, fertilizers and pesticides/herbicides (Oja 2002; Tonisson 2000). Question of non-clear-cut forestry was raised by some environmental NGOs; however, the discussions were not successful because even “green foresters” did not want to discuss it. Estonian forestry school is very much in support of clear-cut management (Pers. Comment of R. Ahas).

Once the NWGFC standard was approved in December 2000, the FSC working group started to develop its own standard, while the PEFC working group was not active for several years. The FSC working group started developing a new national sustainable forestry standard following the FSC principles exactly. Work was much easier because very intensive and principal discussions were held in the NWGFC working group. Discussions were also milder because part of opposition did not join the FSC working group.

However in the FSC certification that started in 1999 SmartWood's so-called Interim Standard for Estonia was used. The standard was formulated based on the NWGFC standard with some modifications and additional points. Since 2003 the SmartWood Interim Forest Management Standards for the Baltic Region have been used in Estonia (Feilberg 2004). For FSC chain of custody certification mainly the SmartWood standard is used (based on FSC CoC requirements) since the majority of CoC certifications have been carried out by the SmartWood representative (NEPCon) (Feilberg 2004). For establishing the PEFC standard in Estonia, a national sustainable forestry standard was abandoned while the technical document of PEFC was used instead.

## **Forestry problems**

The national working group on forest certification (NWGFC) and FSC working group have been attempting to address the key problems of forestry in Estonia. Most problems have been caused by neo-liberal forestry policy, referred to earlier in the paper and by the period of transition. Political, legal and economic reforms, as well as ownership and land reform issues that began once Estonia regained its independence in 1991, have directly influenced the state of the forests. Certification has been seen as a solution mostly by ENGOS and by those managing their forests in sustainable manner. Environmental NGOs also wanted to ensure better oversight and transparency in the forestry sector. For producers, the need to acquire chain of custody certification has been driven primarily by specific requirements of foreign clients for the purchase of certified products (Tonisson 2004). Thus for CoC customers certification has been merely a means

for securing continuous export of certain products to European markets with high environmental consumer awareness (UK and other Western European countries).

Much attention was put to the requirements of the forest management plan in the certification standard. Such an approach was in line with the need to replace too soft state legislation and to fight illegal forestry. At the same time the attempt was made to increase the importance of nature conservation in forest management plans and to stop extensive amelioration works in the forests (Oja 2001).

Special attention was given to spring truce concept. The idea of this is seasonal harmonization of forest management. Such an approach was orchestrated by environmental NGOs, lead by the Estonian Ornithological Society. The aim of the restriction was to protect forest fauna during nesting period and soils in the fragile spring season (Hain 2002; RMK 2003). Spring truce is a strategy that emerged as a counterbalance to industrial (Scandinavian) forestry. In traditional and farming societies nobody has the time or need to log forest during spring, as the soil is fragile, wood is soft and it is time for agricultural work. Environmental NGOs proposed making a break in forest management works for the period of April to July. This proposal met with strong resistance among forest companies and was the primary topic of discussion within the NWGFC for many months. The spring truce concept was successfully applied by the RMK during FSC certification (Lillemets 2004). The first draft of the springtime felling strategy was prepared by RMK in November 2001, barely a month before the FSC certification audit was conducted. The main aim of the strategy was to drastically reduce (almost halt) felling activities in state forests during the sensitive spring time season. A revised strategy was prepared in February 2002 and discussed publicly with stakeholders (Hain 2002). A test implementation of the strategy took place in the same year, and in 2003 the strategy was officially implemented for the first time. Although by 2004 the practice had been accepted among state forest institutions and most stakeholders, it still creates negative feedback from timber industries (EMTL 2003). Estonian ENGOS supported the application of the spring truce strategy in RMK by sending out several press releases (Eesti Keskkonnäuhenduste Koda 2002) and by nominating RMK as a holder of the most environmental-friendly activity in 2003.

Another topic that caused active discussions in the NWGFC working group was the drainage of forests. During Soviet time an extensive drainage network had been established in the forest, and almost all humid or wet forest areas had been affected by drainage. To preserve the ecologically valuable wetlands and wet forest site types, environmentalists had the viewpoint that too much drainage had already been done in Estonian forests, and that no drainage systems should be allowed to be established in certified forests. Many older foresters, who had been involved in the work of drainage system development during Soviet time could not adapt to this approach and disagreed (Oja 2001), claiming drainage as an essential part of forest management activities. The people working on drainage were an active lobby group and afraid of losing their jobs, and many scientists and foresters were very positive about the effect of forest amelioration. In years of Soviet control the amelioration was a nation-wide political priority, and since those times lots of specialists are involved in amelioration (Schults

2004). Many experts say that in Estonia forest drainage is hardly economical, because of the country's low relief, the long growing cycle of trees, and the active population of beavers damming and choking drainage systems and can only be carried out if subsidized (Marvet 2004). Ecologists and environmentalist argue that amelioration is affecting our forest ecology and biodiversity and is bad for ecosystems in natural water bodies (Kuuba 2004; Laanetu 2004).

The main and most extensive problem of Estonian forestry - illegal logging and illegal forestry (Ahas and Hain 2003; Ahas et al. 2002) - has remained largely unsolved with certification. Illegal activities are mainly taking place in private forests (Hain 2003), where certification has not been successful. According to interviews with private forest owners, the implementation of certification would require too many changes and would place large restrictions on the existing liberty of forest management decisions (ELF 2002). For example, the existence of management plans and the payment of taxes is an elementary prerequisite for forest certification, while in private forests illegal activities and tax deception are widespread and management plans are used only in very rare cases (Hain 2003). Illegal forestry (except small-scale forest theft and theft of assortments from intermediate storage areas) is not considered a problem in the FSC certified state forest (RMK), since the organization has control over resources and certification has made the forest management practices and decisions transparent.

In Table 4 the main discussion topics are presented according to Tonisson 2000. The main interest of forest producers for being informed arose from need to be informed about the situation where demand for FSC products appeared in the marketplace. It was also their interest to unite against environmental NGO initiatives for regulating the forestry sector and logging. There were no major conflicts in the process of drafting the PEFC standard in Estonia, as all participating parties shared similar interests.

**Table 4.** Main discussion topics in Estonian NWGFC working group (after Tonisson 2000 and Kuuba 2004).

| Issue                                                                | Arguments                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                              |
|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                      | Pros                                                                                                                                                                                                                                                                                                                            | Cons                                                                                                                                                                                         |
| <b>Spring truce – ban logging in breeding season (Spring-Summer)</b> | <ul style="list-style-type: none"> <li>-no disturbance to nesting birds</li> <li>-protection of forest soil and undergrowth, mosses, berries</li> <li>-avoidance of severe damage to roots and mycorrhiza</li> <li>-reduced erosion</li> <li>-reduced spread of disease and pests</li> <li>-higher quality of timber</li> </ul> | <ul style="list-style-type: none"> <li>-important for forest industry as it represents significant share of total felling</li> <li>-reduced income of forest owners and foresters</li> </ul> |
| <b>Ban on amelioration of wetland forests</b>                        | <ul style="list-style-type: none"> <li>--wetlands have high conservation value</li> <li>-amelioration systems affect natural functioning of forest</li> </ul>                                                                                                                                                                   | <ul style="list-style-type: none"> <li>-many private forests are located on less productive wetlands which could be more productive after land</li> </ul>                                    |

|                                                      |                                                                                                                                                                   |                                                                                                                                                                        |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                      | ecosystems<br>-amelioration systems affect ecosystems in natural water bodies<br>-economic effect is negative since growing cycle of trees is too long in Estonia | improvement                                                                                                                                                            |
| <b>Limiting clear cut management</b>                 | - ecological and sustainable management is without clear cut                                                                                                      | - clear cut is economically more beneficial<br>- Estonian forest unit and clear-cut site is very small                                                                 |
| <b>No introduced species, herbicides, pesticides</b> | - sustainable forestry has to be managed without them                                                                                                             | - there is need for introduced species because of forestry traditions and landscaping<br>- the pesticides and herbicides can be used in case of preventing huge damage |

### **Roadblocks and challenges**

No major obstacles were met during the development of standards and certification. Both FSC and PEFC initiatives faced the problem of low interest among stakeholders and experts, as well as a rushed schedule. Estonia is a small country and the number of people dealing with forestry or certification issues is very limited. Those involved are already overloaded and it is difficult to book additional time for participation in new initiatives or discussions. It seems that a similar problem is appearing across the whole region of Central and Eastern Europe.

As the majority of forest owners in Estonia have very small land units (see Section II) they are not interested in forest management as a primary source of income. This makes it relatively difficult to involve them into discussions, training or to establish cooperation. Cooperation of land owners is also slow in Estonia because, after 50 years of the centrally-controlled Soviet system, forest owners want to be masters of their land.

## **IV. THE REACTION TO CERTIFICATION**

### **Forest policy community and stakeholders**

None of the certification schemes had direct opponents. The work on national sustainable forestry standard was started jointly, and this cooperation helped to ease later conflicts as teams developing FSC and PEFC certification schemes worked separately. Supporters and skeptics of FSC and PEFC certification schemes had opposite opinions. While environmental NGOs were supporting FSC and had skeptical opinions towards PEFC, the majority of forest owners and the timber industry were skeptical towards FSC

and backed the PEFC. Most of the timber industry companies who have FSC CoC certificates have pursued it due to direct requirements of clients (Feilberg 2004).

Various forest companies have tried to support both certification schemes in order to keep track on the developments and remain competitive (Talijärv 2004). Among some forest companies, the resistance to the spring truce concept and temporary halting of forest management is still visible.

As the results of questioning for the current study showed, the forestry and environmental officials and state representatives are, however, in a rather neutral or skeptical position on certification issues today. They refer very often to additional expenditures and see no significant benefits of certification. Many local foresters and inhabitants are also critical of certification, as they consider investing in environmental protection and safety unnecessary and a waste of limited resources in forestry and rural areas. Many officials and specialists in RMK are critical of FSC, as it created many new procedures and additional bureaucracy.

### **Forest Owners**

A clear distinction can be made between private forest owners and the state forest manager. The state, as the largest forest owner in Estonia, has well educated staff and has an FSC friendly approach. Small private forest owners from the countryside are typically not interested in any type of certification or other regulations. An active part of forest owners that live in cities often belong to a forest owners association, and support the PEFC as some financial or institutional support is promised through that system. During interviews for current study the land owners and representatives of forest owners associations said that their organizations support cooperation and certification of small owners with funds from the state budget, or international support. This is an important tool to keep owners interested in cooperation and certification. The FSC system, however, has no organizational support from forest owner organizations today. Big companies owning forests are generally skeptical towards certification. Their management standard today includes high harvesting rates and lack of management plans which makes it difficult to achieve certification (Hain and Ahas 2004).

### **Current Status of Forestland Certification**

There are two FSC forest management certificates issued in Estonia as of April 2004. No forests have been certified according to PEFC. The entire Estonian State Forest Management Centre (RMK) has an FSC certificate, which covers in total 1 063 000 ha of forest lands (less than 900 000 ha of it is actually covered with forests). The second certificate has been issued to a private forest owner, Mr Lembit Laks, and covers 517 ha. Apart from problems with illegal forestry discussed above, certification among private forest owners is paralyzed because of very small forest properties (80% below 10 ha: Yearbook 2002) and the low level of organization and cooperation among private forest owners. Cooperation for group certification is particularly lacking because of the low interest among forest owners from rural areas.

In addition to the forest management certification, Estonian forest companies and intermediaries have 10 chain of custody certificates as of April 2004 (see next section). Four CoC certificates were suspended during 2004 because of economic problems or violation of FSC and/or certifiers rules (Tonisson 2004).

### Current Status of the Certified Marketplace

Since there are no domestic PEFC certified sources available in Estonia, the following section considers almost exclusively FSC certified material (Table 5).

The abundance of certified roundwood in the Estonian certified marketplace is contrasted with a relative deficiency of certified lumber, which in turn hinders the progress of certification among secondary processors (Feilberg 2004). The primary supplier of FSC certified raw material is State Forest Management Center (RMK). In 2003 RMK sold ca 2.7 million cubic meters of FSC certified timber, and similar volumes are maintained in each year. Additionally small quantities of certified timber are sold each year by a certified private forest owner who manages ca 500 ha of forests. The share of roundwood sold directly by RMK for export is insignificant (below 500 cbm in 2003 (Kaubi 2004)), however the real volume of roundwood exported is much higher. Exact figures are not known since timber is bought by intermediate local companies or local representatives of foreign companies and sold further from the intermediate storage yards. According to the authors' estimation, however, the share of exported roundwood could be close to half of the total certified sales. Today both RMK and producers with FSC chain of custody certification face a situation in which a large market for FSC products has not been found, and only in rare cases is there willingness to pay extra for certified products. In such conditions it is difficult to stand firm about need for certification and it does not encourage other companies to follow (Tonisson 2004). As our interviews revealed, it is also reality that Estonian timber industries have more demand for non-certified wood products than they can meet; therefore the number of companies who are willing to spend time and money for certification is limited.

**Table 5.** Valid FSC certificates in Estonia as of 1 of February 2004 and approximate sales of certified timber in 2003.

| Type of company        | Number of FSC certificates | Certified annual sales (cbm) |
|------------------------|----------------------------|------------------------------|
| Forest manager         | 2                          | 2 700 000                    |
| Primary manufacturer   | 7                          | 900*                         |
| Secondary manufacturer | 4                          | 700*                         |
| Brokers                | 1                          | -                            |

Sources: SW database 2004; FSC 2004; Kaubi 2004; interviews

\*Since most of the companies did not want to provide specific data, the figures are rough estimations based on interviews.

Unfortunately less than 0.1 pct of the certified roundwood is processed as certified by primary and secondary manufacturers. The main types of certified products presently manufactured in Estonia are DIY garden products and small quantities of lumber (Feilberg 2004). See explanation of reasons for such situation and main bottlenecks in Section V.

## **V. EFFECTS OF FOREST CERTIFICATION**

The present section focuses on the certification of state forests, which are virtually the only certified forest in Estonia. It is also worth noting that because RMK's land is certified by both FSC and ISO 14001, the effects discussed here do not come exclusively from FSC.

### **Power**

The most important change brought to Estonia through certification was the increased discussion between different stakeholders. Discussions started in 1998 within the National Working Group on Forest Certification (NWGFC), which involved the participation of more than 40 organizations and representatives. The group of people supporting certification has grown through the certification of the State Forest Management Centre (RMK) as more forestry officials and entrepreneurs came on board. The number of RMK senior staff members interested in certification issues has been growing. Results of our interviews during the current study show that certification has caused changes in the very thinking and attitude of people in Estonian forestry sector. More attention is given to environmental and social issues. Nevertheless, the understanding of certification and its impacts differs a lot. As result of questioning and interviews we can distinguish three major groups of FSC stakeholders, having clearly different understanding.

The first group is made up of environmentalists, specialists of RMK and people involved in the work of the national sustainable forestry standard. This group values the essence of certification and is assessing its outcome as positive. There are still some environmentalists, however, who are skeptical about certification and its effects. The second group is made of typical forestry entrepreneurs and many state foresters which have a skeptical attitude towards certification. This group thinks of certification as an unnecessary additional obligation which does not result in significant benefits. Members of this group claims that certification causes decreased volume of available timber and increases bureaucratic paperwork. A third, rather isolated group is private forest owners. This group doesn't have direct link and interest with certification.

Because of the high volume of illegal forestry and unsustainable rate of over-logging the reputation of Estonian forestry has typically been low both among local population and abroad. FSC certification of almost half of the forest lands (state forests) has helped to improve the reputation among some local and international interest groups of the state as a good forest owner and manager. RMK presently has the general support of environmental NGOs and the reputation of the Estonian forest sector has been rising.

According to the interview responses of various RMK officials, RMK has mostly benefited from FSC certification through its increased reputation, better developed management system and new contacts. Certification made RMK's management more transparent and clear, which is also an important role of ISO 14001 certification (for which RMK applied at the same time). During certification many management processes were changed and new ones initiated. The success of RMK has been proven by an internationally recognized certifier. At the same time, some NGO and company representatives noticed that the information flow from RMK has been formalized now, and only certain staff members have permission to talk with the public or journalists. It has caused some to wonder whether RMK has thus become more secretive and closed to outside parties. Many stakeholders are starting to ask if RMK has some information to hide as they communicate less often and more carefully.

Environmental NGOs have also gained more power (Trapido 2004) through certification process as they have gained more opportunities to spread their environmental message and to directly monitor activities in the forestry sector. Many ideas of the environmentalists (such as biodiversity trees, protected areas, spring truce, landscape ecology in management plans) have made it into the daily practice of RMK though certification. However, NGOs are still rather weak and have been thus unable to fully utilize their potential during audits at RMK. The third group that has received more rights and influence through certification are forestry workers.

One important issue coming out from our questionnaires and interviews is connected with worker safety and security issues, which are now addressed much more frequently in RMK. This gives more rights and power to workers and contractors working with RMK, and changes the typical position of Estonian workers, which is to work as required and not to discuss things. Still it appears that the trade unions and local organizations did not realize the full range of their possibilities during the certification process.

## **Social**

Certification of RMK has changed training, security and health care of its staff. RMK had to reorganize its measures for labor security and health care and to start monitoring their implementation. Quite strict policies were established, as such issues were neglected in Estonia earlier due to prevailing liberalism. Even the problems of the people working in state forests were previously not dealt with. Regardless of the activities and measures for protection of workers' health, such expenditures are still seen by companies as useless and an unnecessary demand. Taking care of one's health is low priority among Estonian population. Average life expectancy in Estonia is just 65 years for men and 77 years for women (SOE 2003).

Many entrepreneurs and forestry officials are claiming that access to timber as a resource has been limited because of certification, and that felling volumes are decreasing. They also argue that it increases unemployment in the countryside and that

people without special training lose the possibility of working for RMK. Forest industries and officials also claim that the spring truce increases unemployment. On the other hand, the share of illegal forestry decreased, as RMK can now cooperate only with legal entities. Less timber from state owned forests can enter illegal market and when more taxes are collected peoples' social security increases.

Only very few respondents did recall positive influence of certification to the local inhabitants and businesses. Local groups and opinions were not active during certification discussions, as they are isolated and because of everyday work they can not participate in meetings. There are still serious communication problems between national initiatives in Tallinn and local interests. Still surveys of public opinion show that people dealing with tourism and catering of forest berries and mushrooms are worried about decreasing forest coverage. Tourism entrepreneurs do not like big clearcuts as tourists value more natural landscapes and forests. Lack of suitable forests for picking of forest berries and mushrooms is especially visible in agricultural regions with fewer forests. In such areas with fertile soils the forest is more valuable and therefore there is a pressure to use it more intensively. Tourism and catering of forest berries and mushrooms are however one of the very few and seasonally variable sources of income in Estonian poorest remote regions.

### **Economic**

Results of our questionnaires and interviews showed that certification has changed activities and markets for those companies which were able to find markets for specialized products, or whose clients demanded FSC certificate. The secondary processors are in a very few cases also receiving better revenues and profits for certified products (interviews). Nevertheless the chain of custody certificate (CoC) creates a competition advantage or helps to maintain certain foreign clients who demand FSC (foremostly in UK and other Western-European countries), but as a rule price premiums have not been observed (interviews). Generally, forest companies have noticed that certification has slightly changed business contacts and traditions, and that new spheres and topics of discussion emerged. New markets and competition opened for certain products. Stability in forestry also assists local tourism industry and those dealing with catering of forest fruits and mushrooms as their investments are more secure.

In general the majority of forest companies are skeptical about future markets and profits. They are ready to invest into certification as a backup option in case the market situation changes. There are rumors that certain countries may start to demand FSC certification from importers from tropical or CEE countries.

Certification entails additional costs, which were highlighted by all forest officials, owners and producers we contacted during this study. The exact value of such additional expenses are, however, not known or is proprietary information. Additional costs are not easy to estimate, as they involve both the direct costs as well as the costs of training, safety, technique and environment. Respondents highlighted increased costs of staff as salaries started to be linked with qualifications. Costs of timber for certified

products rose slightly. Higher timber costs in Estonia were actually caused by a lack of roundwood, which in turn resulted from over-capacity of Estonian saw mills and earlier over-logging. Owners of chain of custody were concerned about the requirement of separate storage facilities for FSC certified products. Increasing storage areas is a big problem for some companies because of a lack of land or the high price of land.

Skeptical forest owners and companies cannot see any direct benefit of FSC certification. There are only a few products (mostly secondary products) which can be sold for a price premium (interviews). Many entrepreneurs, forest owners and officials claim that even without certification, the demand for forest products is strong in Estonia and it is easy to sell any forest products. And they say that if Europe closes its market for non-certified products, they will still have a large demand in the Middle-East, Russia and Asia. This skeptical group thinks that less timber is allowed to be felled in sustainably managed and certified forests, and that total felling volumes will start to decrease as a result, leading to lower incomes. Such people also claim that once logging decreases in certified forests, this loss will be balanced by higher logging rates in other forests.

## **Environmental**

The most direct benefits of FSC certification have been achieved in the field of environment. Protection of the environment has gained more importance, environmental NGOs have been able to act successfully, the reputation of the companies being certified has been growing and the Estonian State as a large forest owner has a better image. In the following paragraphs the environmental benefits that have been achieved are illustrated mostly with example of RMK.

If asked to estimate the environmental impacts of certification, most respondents stress that in companies that voluntarily did certification the senior management became much more environmentally educated and aware. Extensive trainings have been held, numerous manuals and educational campaigns held. The level of knowledge has been rising in all target groups. Management of state forest has changed significantly because of certification.

Logging rules and methods that were virtually absent previously have been renewed and companies are now considering environmental factors. Guidelines and procedures for implementation of certain works were established in order to minimize negative impacts to ecosystems and soils (Trapido 2004). In addition to strict guidelines, the broader framework for good forest management was worked out and has been followed quite well. RMK has started to draft measures for taking the specifics of landscapes into account while managing the forests. However, despite pressure from environmentalists during certification, the share of clearcut-free management in RMK has not risen. Estonian foresters and forestry scientists often cannot accept forestry without clearcuts.

There are many concrete environmental impacts of the certification that were described by the questioned stakeholders:

(a) RMK is keeping records and systematically planning measures to protect endangered species and biodiversity values. The same goes for sites of historical heritage and value. Earlier only environmental agencies exposed such data and plans.

(b) Methodology for preservation of biological diversity has been created and is implemented. Conservation of key biotopes, interesting natural sights, dead wood and biodiversity trees is being implemented, although such an approach was strange for older foresters. There have been problems with dead wood and biodiversity trees because some local residents are secretly going to felling units to collect firewood from left over material and do not understand why it is not allowed. There are still foresters for whom a good forest is a cleared and organized one.

(c) Many discussions have ensued from the inclusion of the spring truce concept in the national sustainable forestry standard. In the RMK certification the SmartWood Baltic Standard was used and RMK established special strategy for forest management during spring and summer. RMK has voluntarily cancelled most of forest works for the period of April 15 to June 30 to disturb breeding animals and birds less. At RMK this period is used for vacations, maintenance of machinery and planting of forests. According to environmentalists and the general public the spring truce has improved the state of the environment and created a positive image for RMK. Thus the spring truce is among the very few examples of activities caused by certification that have broad public support, appearing as headlines in prominent newspapers (Eesti Päevaleht 2004; Schank 2004).

(d) Certain success has been achieved in stopping establishment of new amelioration networks in forests (Kuuba 2004). For renovation of existing drainage systems and establishment of new forest roads, at the very least environmental assessment and respective planning is being carried out prior to such works (Schults 2004).

(e) Work has been initiated to limit use of chemical substances and exotic species. From another perspective, our questioning revealed that some forest officials are dissatisfied with this development, as they are sure that chemicals help to save trees from pests and the planting of exotic species has a long tradition in Estonia.

(f) Although some of the activities at RMK allegedly still take place spontaneously, key activities are planned in a more strategic way and are controlled during their implementation

Skeptical forest officials and entrepreneurs do not like very strict environmental measures as it limits their ability to make free decisions during forest management. Lots of resistance and misunderstanding is caused by the call to leave dead and biodiversity trees in the forest, as it is seen as a waste of resources and esthetically ugly and disturbing. There are also concerns that too many areas have been signed for conservation purposes, which limits possibilities for forest management. Many people are quite critical of the spring truce. The period is considered to be too long and the entire approach of a ban is thought to be too radical.

There are also some skeptical environmentalists who find that certification looks nice only on paper, while forest management practices remain unchanged, destruction of landscapes and soils continues, as does the use of chemicals. They say that certification was a tactical step taken by RMK to fool environmental NGOs and the international audience. Other experts content that the certification of RMK has led to the over-logging of private forests.

## **VI. CONCLUSION**

Certification has introduced a new paradigm to the Estonian forestry sector. Its most important achievement has been initiating discussions between different stakeholders in the NWGFC since 1998. New ideas have emerged among foresters and NGOs, and an entire generation of people has become aware of sustainable forestry. Another important outcome has been the FSC certification of 40% of Estonian forests, which has improved both environmental quality and the country's forestry reputation. State Forest Management Center RMK has established rules for managing its forests while saving the environment, and has also worked hard to implement those rules. Efforts have been made to increase social security for forest laborers. RMK has become a more progressive environmental advocate than even the Ministry of Environment, which is supposed to be the leader on conservation issues.

Certification has not yet reached private forest owners. Most of their holdings are less than 10 ha, a smaller plot of land than a typical forest unit. Furthermore, organization and cooperation among private forest owners are minimal, making it difficult to exchange information, promote certification, and communicate effectively. Thus certification has not solved the problem of unsustainable over-logging and illegal forestry in private forests. Better involvement of private forest owners should become the main goal of interested parties for better forest management in the coming years. This goal could be reached if certified products were valued more highly in markets, but at the moment this is unfortunately not the case.

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