



**UNIVERSITY  
OF TURKU**

Faculty of Law

# **The destruction of river pearl mussels in Hukkajoki**

A case study of state-corporate environmental crime in the Finnish logging industry

OT00BE44-3001 Corporate Crime, Law and Power

Bachelor thesis

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28.4.2025

The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin Originality Check service

Bachelor thesis

**Subject:** OT00BE44-3001 Corporate Crime, Law and Power

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**Title:** The destruction of river pearl mussels in Hukkajoki – A case study of state-corporate environmental crime in the Finnish logging industry

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**Number of pages:** 25 pages

**Date:** 28.4.2025

This case study reviews the destruction of over a thousand endangered river pearl mussels by Stora Enso, a Finnish forestry corporate giant. The case is currently being investigated by the Finnish police as an aggravated environmental conservation crime. We will study the public, political and criminal justice reactions to the crime as well as the circumstances that led to it. We will also study the relationship between the Finnish state and the forest industry, as well as the state of Finnish laws and regulations regarding logging.

Our findings are that there exists a regime of permission between the Finnish government and the forest industry. It is made possible through lax forestry law and compliance regulation. The results are constant environmental crimes committed by the logging industry, that only really get noticed when a moment of rupture like the Hukkajoki case occurs. We propose stricter regulations and call for societal awareness and vigilance on the matter.

This case study is based on news by Yle, Helsingin Sanomat and others. Our key source on the problems of the PEFC certificate system is the Yle MOT document “Tuhotun metsän tarina”, a part of the ICIJ investigation “Deforestation Inc.” The theoretical base for our case study is the state-corporate crime theory coined by R. C. Kramer. Other key concepts in our theoretical framework are Acts of Omission as defined by D. Kauzlarich and R. White and points of rupture and regimes of permission as defined by D. Whyte and I. Bernat.

**Key words:** state-corporate crime, environmental crime, logging, Forest Act

Tämä tapaustutkimus käsittelee Stora Enson aiheuttamaa raakkutuhoa, jossa kuoli yli tuhat uhanalaista jokihelmisimpukkaa eli raakkua. Poliisi tutkii tällä hetkellä tapausta törkeänä luonnonsuojelurikoksena. Tutkimme rikoksen julkista, poliittista ja rikosoikeudellista käsittelyä samoin kuin rikokseen vaikuttaneita olosuhteita. Tutkimme myös Suomen valtion ja metsäteollisuuden välistä suhdetta sekä hakkuita sääntelevää lakia ja muuta sääntelyä.

Tuloksemme on, että Suomen valtion ja metsäteollisuuden välillä on olemassa sallivuuden järjestelmä, “regime of permission”, joka johtaa metsäyhtiöiden hakkuissa tekemiin jatkuviin ympäristörikoksiin. Näistä rikoksista Hukkajoki on vain jäänvuoren huippu, repeämispiste. Järjestelmän mahdollistavat löyhä metsälaki ja vapaaehtoinen sääntely. Ratkaisuksi ehdotamme tiukempaa sääntelyä ja toivomme yhteiskunnallista valppautta ja aktiivisuutta asian suhteen.

Tapaustutkimus perustuu Ylen, Helsingin Sanomien ja muiden lehtien uutisiin. Tärkein lähtemme PEFC-sertifikaatin ongelmista on Yle MOT:n dokumentti “Tuhotun metsän tarina”, joka on osa ICIJ:n kansainvälistä selvitystä “Deforestation Inc.” Tutkimuksen teoreettinen pohja perustuu R. C. Kramerin kehittämään teoriaan “valtioiden ja yhtiöiden välisestä organisaatorikollisuudesta”. Muita avainelementtejä tutkimuksessamme ovat “peitesääntely” D. Kauzlarichia ja R. Whiteä mukailten, sekä D. Whyten ja I. Bernatin määrittelemät “repeämispisteet” ja “sallivuuden järjestelmät”.

**Avainsanat:** organisaatorikollisuus, ympäristörikollisuus, hakkuut, metsälaki

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## List of Abbreviations

ELY-centre	Elinkeino-, liikenne- ja ympäristökeskus
FSC	Forest Stewardship Council
ICIJ	International Consortium of Investigative Journalists
PEFC	Programme for the Endorsement of Forest Certification

## **Appendices**

### **Appendix on the division of labour**

Yrjö-Veikko Kleine: Theoretical background, state-corporate-crime analysis.

Sakari Vääriskoski: Public representation of the case, conclusion.

Sirkku Riitala: Introduction, legislation and regulation behind forest industry.

# 1 Introduction

Logging carried out by Stora Enso at Suomusjoki and Hukkajoki caused significant environmental damage to river pearl mussels. The events began on August 15, 2024, when Stora Enso's subcontractor's harvesting equipment repeatedly crossed the river at a site with a highly endangered river pearl mussel population, potentially hundreds of times.<sup>1</sup> The damage occurred in an uncertified forest, despite over 90 percent of Finland's commercial forests being PEFC certified. PEFC (Programme for the Endorsement of Forest Certification) is the world's largest forest certification system that claims to promote sustainable forestry by supporting biodiversity, productivity, regenerative capacity, and vitality.<sup>2</sup>

The forest industry is a significant part of Finnish industry from both an economic and employment perspective. In 2022, the value of forest industry production was approximately EUR 20 billion.<sup>3</sup> The political and economic importance of the forest industry will be explained and argued in a deeper level in chapter 3.2. The management and use of Finnish forests is regulated by the Forest Act, which was revised and entered into force at the beginning of 2014. According to Chapter 1 Section 1 of the Forest Act, the purpose of the Forest Act is to promote the economically, ecologically and socially sustainable management and use of forests in a way that sustainably yields good returns while preserving their biodiversity.

The aim of this bachelor thesis is to review the destruction of river pearl mussels caused by Stora Enso from a state-corporate crime point of view. The aim is to analyse the reasons that led to the destruction and the regulation that allows nature destruction like this to happen. The goal of this bachelor thesis is also to analyse the current legislation and regulation that seems to be non-committal and lacking means to address forestry weak spots from nature's point of view.

We will achieve the aims mentioned above by getting acquainted with the details of the Hukkajoki case and through a deeper understanding of forest-related regulation and with a practical analysis of its application. The goals will be achieved by immersing oneself in the PEFC system and the Forest Act. In this bachelor thesis we will also be showing that there is

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<sup>1</sup> Kaivanto 27.8.2024.

<sup>2</sup> PEFC.

<sup>3</sup> Maa- ja metsätalousministeriö.

a regime of permission with the Finnish government and forest industry and apply different theories to analyse our hypothesis. The research method is juridical.<sup>4</sup> The purpose of this research is to examine and analyse the current law and legal system. The sources of this research consists of laws, legal literature and other possible sources such as news articles.

The first research question of this bachelor thesis is: is the Finnish state practising state-corporate environmental crime in collaboration with the forest industry? The second research question is what is the role of the Finnish state in enabling the destruction at Hukkajoki, and could it have been prevented, if the forest had been PEFC certified? The third research question is how was the case represented in various public discussions, and what impact, if any, did they have on regulatory ambitions and practices?

We will start this bachelor thesis in chapter 2 with presenting the public representation of the case – how media and politics handled the Hukkajoki incident. We will also consider the media representation from a criminal justice point of view. In chapter 3 we will present and apply a number of theories: state-corporate crime,<sup>5</sup> acts of omission,<sup>6</sup> moments of rupture and regimes of permission,<sup>7</sup> the imaginary social order<sup>8</sup> and compliance regulation.<sup>9</sup> The use of theories is backgrounded and supported by the criminogenic background of corporations.<sup>10</sup> Chapter 4 is about proving how the Hukkajoki case is a great example of state-corporate crime, giving examples of the collusion between state and industry. In that chapter we will also analyse the looseness of forest regulation. Chapter 5 includes the conclusions made throughout this bachelor thesis.

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<sup>4</sup> Hirvonen 2011, p. 21-22

<sup>5</sup> Kramer – Michalowski – Kauzlarich 2002.

<sup>6</sup> Kauzlarich – Mullins – Matthews 2003.

<sup>7</sup> Bernat – Whyte 2017 p.80.

<sup>8</sup> Pearce 1976, p. 66.

<sup>9</sup> Friedrichs 1996, pp. 272–273, pp. 314–315.

<sup>10</sup> Friedrichs 1996, pp. 55–59, p. 150.

## 2 Public representation of the case

### 2.1 Background

The river pearl mussel is a key species in stream ecosystems, playing a crucial role in maintaining water quality. Large populations of river pearl mussels contribute significantly to the purification of river water. According to the Centres for Economic Development, Transport and the Environment, these mussels filter about 50 liters of water daily while feeding. However, their populations have deteriorated due to various human activities, including forestry drainage and tillage.<sup>11</sup>

The events of the incident began when a forest biologist at Stora Enso's harvesting site noticed that the forest machines were crossing Hukkajoki at a highly endangered river pearl mussel deposit. The biologist had gone to the forest machine driver to point it out, but he had continued to cross the river. Forest machines rumbled river pearl mussels as many as hundreds of times as they crossed the river. The logging operations in this case were assigned to a long-time contractor of Stora Enso, who in turn assigned the work to a subcontractor. Currently, it is unclear which party or parties have acted negligently, but according to evidence presented by the subcontractor, they were not made aware of the presence of the mussels.<sup>12</sup>

Police are investigating the incident as an aggravated nature conservation crime (Subsection 5 a, section 48 of the Criminal Code of Finland 39-001/1889), in which as many as thousands of endangered mussels have died. So far, the preliminary results of the investigation of the case have not been publicly announced, but police have stated they have identified multiple potential culprits and as of December 2024 the investigation was said to be on the finish line. Stora Enso has apologised for what happened and said that they will take responsibility both financially and environmentally.<sup>13</sup> In a decree issued by the Ministry of the Environment, the indicative value of a single river pearl mussel is set at 589 euros.<sup>14</sup>

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<sup>11</sup> Metsähallitus.

<sup>12</sup> Pelli 17.12.2024.

<sup>13</sup> Kaivanto 27.8.2024.

<sup>14</sup> Ruonakoski 21.8.2024.

## 2.2 Representation in media

The incident has been reported widely across different media outlets, garnering lots of attention from the public. Actions of Stora Enso have been largely criticized and vilified by news agencies, environmental activists and politicians alike.

Such coverage not only underscores the scale of the environmental damage but also questions the broader practices of the forestry sector, highlighting concerns over inadequate safeguards in sensitive natural habitats. These views have been shared by the Finnish media, which has been unanimously critical of Stora Enso and its shortcomings on the matter.<sup>15</sup>

Media coverage of the incident has been overwhelmingly negative and critical, with many outlets highlighting the severe environmental damage and the systemic failures that allowed the disaster to occur. Articles by Reuters, Sweden Herald, and others have described the event using stark terms like “mussel massacre” and “environmental disaster.”<sup>16</sup> Journalists have not shied away from exposing the shortcomings in Stora Enso's operational protocols, questioning how a company with extensive environmental guidelines could permit such an egregious lapse in judgment.

The official explanations provided by Stora Enso have been reported with a degree of neutrality in some news outlets. The company's apologies and justifications — centred on purported communication errors and unforeseen technical issues — have often been presented without the scrutiny that the situation demands.<sup>17</sup> This leniency in media treatment of the corporate narrative creates an imbalance in the public discourse. By giving these excuses a platform that lacks critical interrogation, there is an inadvertent implication that such oversights might be excusable or even inevitable in the complex world of forestry operations. While more environmentally conscious publications, organizations and NGO's are aware of these corporate tactics of shifting the blame and making up excuses and won't let them slide, many more casual news agencies with a wide audience like the yellow papers seemingly don't have the time or the resources to challenge and investigate these claims made by the corporation.

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<sup>15</sup> Freyborg 23.8.2024.

<sup>16</sup> Sweden Herald 7.10.2024.

<sup>17</sup> MTV Uutiset 26.08.2024.

This disparity in tone between the condemnatory media coverage and the placid presentation of the company's explanations poses a significant concern. It risks setting and enforcing a dangerous precedent where environmental transgressions are met with minimal accountability. Without a robust challenge to the narratives that downplay the severity of the incident, it's likely there is little incentive for companies to invest in more stringent environmental safeguards. In effect, the muted critique of Stora Enso's excuses may embolden similar behaviour in the future, undermining the enforcement of environmental protection measures and fostering a culture of carelessness.

Ultimately, if these explanations continue to be accepted at face value, without the necessary demand for accountability and systemic change, there is a real danger that the status quo will prevail, and serious consequences will remain elusive. This could pave the way for further disregard of environmental standards, ultimately compromising efforts to protect our natural habitats and the vulnerable species that depend on them.

### **2.3 Reactions in politics**

The political response in Finland to the environmental disaster has been unanimously condemnatory, with parties across the political spectrum denouncing the destruction caused by Stora Enso's logging operations. The now former environmental minister Kai Mykkänen, among many others, has demanded that the company bear full financial responsibility for the restoration of the damaged river ecosystem.<sup>18</sup>

Unsurprisingly, the Green Party has been among the most vocal in calling for stricter consequences for Stora Enso. In addition, demanding significant repercussions for the company, the party's leader Sofia Virta has also used the incident to push for broader legislative changes to prevent similar occurrences in the future. One of their key proposals is the establishment of extended environmental protections for all rivers that serve as habitats for freshwater pearl mussels. This would include the creation of designated "safe zones" around these rivers, where logging and other forestry activities would be strictly prohibited.<sup>19</sup> Such measures aim not only to safeguard existing mussel populations but also to ensure the long-term preservation of these fragile ecosystems, which are already under significant threat from human activity and pollution. In addition to the expected harsh criticism from the greens, even

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<sup>18</sup> Pelli 23.8.2024.

<sup>19</sup> Aaltonen 10.9.2024.

the pro-logging Centre Party and National Coalition Party made scathing comments about the incident demanding repercussions.<sup>20</sup>

The unified political response signals a growing acknowledgment of the urgent need for stronger environmental regulations. While Mykkänen's demands for financial accountability address the immediate consequences of the incident, the Green Party and environmental advocates emphasize that real progress requires systemic change. By pushing for expanded protections, they seek to fundamentally change how forestry operations interact with sensitive ecosystems, ensuring that economic interests wouldn't so often take precedence over biodiversity. The debate now shifts to whether these calls for reform will translate into concrete legislative action or if, as has often been the case, industry interests will dilute efforts at meaningful environmental protection and legislative improvements.

## **2.4 Criminal justice view**

From a criminal justice standpoint, the reaction to the incident has been notably lackluster, as one could expect. Although the police have initiated a large investigation into what has been labelled an egregious environmental crime, the likelihood of any individual facing actual prison time appears slim.<sup>21</sup> The company has been compelled to finance the river's restoration and will probably pay additional fines, but these measures fall short of delivering any truly meaningful punishment.

The structure of corporate liability further complicates the issue. The protective corporate veil shields high-level executives—the decision-makers responsible for setting policies and practices that ultimately led to the disaster. This insulation means that, aside from the operator of the tractor responsible for the damages, there is scant accountability for those whose strategic choices directly contributed to the catastrophe.<sup>22</sup> In many respects, the driver is merely a small cog in the vast machinery of the Finnish logging industry, and available reports suggest that his personal actions were not the root cause of the environmental damage.

Consequently, the public is left with the difficult task of identifying those who are truly liable for the incident. The focus on the driver distracts from the systemic issues within the

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<sup>20</sup> Waris 23.8.2024.

<sup>21</sup> Kerkelä 22.8.2024.

<sup>22</sup> Lassila 24.10.2024.

corporation and the industry at large. Without holding the higher-ups of Stora Enso and the contractor accountable, the enforcement of environmental justice is significantly hampered, perpetuating a cycle in which corporate malfeasance is met with what basically amounts to a slap on the wrist in the form of bad publicity and fines.

### 3 Theoretical background

We will now introduce corporate crime theories that we find are useful for analyzing the events that took place in Hukkajoki, as well as the media, political and criminal justice responses to it. In this chapter we will only shortly connect each theory to the case – further analysis will follow in chapter 4.

#### 3.1 The criminogenic structure of corporations

According to Stora Enso's website, responsible wood sourcing and forest management are at the core of its operations, which includes protecting forest biodiversity.<sup>23</sup> However, Stora Enso's transactions involving mussel-inhabited woodlands were conducted with a private forest owner who lacked certification for sustainable forestry.<sup>24</sup> This oversight can be better understood as part and parcel of the company's operations when looking at its past actions.

David Friedrichs and many other critical criminologists<sup>25</sup> hold the view that the structure of corporations is inherently criminogenic. Because of the capitalist imperatives of expanding and creating more capital, corporations will break the law or comply to it as little as possible.<sup>26</sup> The corporate veil protects the people behind crimes committed by corporations. Shareholders are protected by limited shareholder liability, management can almost always plausibly claim they knew nothing of the crimes happening, and whole corporations can distance themselves from criminal actions by chains of subcontracting and setting up shell companies.<sup>27</sup>

Corporations were behind the great colonial trading companies and the slave trade,<sup>28</sup> and it is a well-known fact that corporations today are still globally engaging in worker exploitation<sup>29</sup> and child labour - this being characterized as a new form of colonization and a crime akin to slavery.<sup>30</sup> In addition to being inherently criminogenic, David Whyte claims that the structure of corporations is also inherently ecocidal.<sup>31</sup> This means that the same capitalist imperatives

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<sup>23</sup> Stora Enso.

<sup>24</sup> Kaivanto 27.8.2024.

<sup>25</sup> See for example: Whyte 2020; Pearce, 1976; Bernat – Whyte 2017.

<sup>26</sup> Young 1976, p. 15.

<sup>27</sup> Friedrichs 1996, pp. 55–59.

<sup>28</sup> Friedrichs 1996, p. 55.

<sup>29</sup> Rapala – Sjölund 2023, p. 61.

<sup>30</sup> Friedrichs 1996, p. 150.

<sup>31</sup> Whyte 2020.

that lead to corporations breaking the law will also lead to the destruction of nature for corporate profit.

Stora Enso is one of the world's oldest corporations still existing today, if not the oldest. Its corporate grandfather, Stora Kopparberg, is the first documented corporation. Founded in 1288, Stora Kopparberg itself was originally created for the running of a copper mine in Falun, Sweden. It was responsible for the Falun ecocide.<sup>32</sup> The Falun mine was described by Carl von Linné (1707–1778) in the year 1734:

Never has any Poet been able to describe Styx, Regnum Subterraneum and Plutonis, nor any theologus hell as gruesome as we can see it here. For outside a poisonous, acrid and sulphurous smoke rises and poisons the air far and wide so that one cannot without pains go there. The smoke corrodes the earth, so that no plants can grow around.<sup>33</sup>

Stora Enso has also contributed to the destruction of nature in more recent times. Police are investigating a case in Sweden from last year, where Stora Enso is claimed to have cut down over 300-year-old protected trees.<sup>34</sup> Meanwhile in South America, it is constantly being accused of engaging in crime – in Brazil a company called Veracel, owned 50-50 by Stora Enso and Brazilian Fibria, has been accused of engaging in environmental and other corporate crime since 2005.<sup>35</sup> In Uruguay, Stora Enso's actions together with Chilean corporation Arauco have been characterized as neo-colonial by the Uruguayan attorney general.<sup>36</sup>

It seems, that the criminogenic flaws found to be so inherent to corporations are all found in the operations of Stora Enso. In addition to gaining a reputation for its ecocidal and neo-colonial tendencies, Stora Enso has also engaged in worker exploitation in the form of child labour. When questioned about it in 2012, Lauri Peltola, then senior executive at Stora Enso, commented that “If we pulled out, five-year-old girls would become prostitutes the next day.” Children were used in the collection of wastepaper by subcontractors of Bull Shah Packaging Ltd., of which Stora Enso owned 35 % at the time – it was a joint venture between Stora Enso and local Pakistani Packages Ltd.<sup>37</sup>

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<sup>32</sup> Whyte 2020, pp. 1–2.

<sup>33</sup> von Linné 1889, p. 360. Original Swedish text; Ek – Renberg 2001, p. 89. English translation.

<sup>34</sup> Suihkonen 25.8.2024.

<sup>35</sup> Frayssinet 16.5.2011.

<sup>36</sup> Kanninen 18.6.2013.

<sup>37</sup> Teivainen 7.3.2014.

Taking into account Stora Enso's history and international reputation, we will now shift the focus into Finland and the current time. We will examine the Hukkajoki case through state-corporate crime theory and as a moment of rupture. Therefore, our focus is on the relationship between the Finnish state and the forest industry, and acts of omission perpetuated by the Finnish state.

### 3.2 State-corporate crime

The term "state-corporate crime" was first used publicly by Ronald C. Kramer in 1990, and later that year he published a case study and several other papers on the subject. In all of these presentations he pointed to the fact that nations and corporations can act together to produce serious criminality. He later refined this definition together with Raymond J. Michalowski: State-corporate crimes are the harmful consequences of deviant interorganizational relationships between business and government.

After that, the concept was further refined by the two and they asserted that state-corporate crime could take on two distinct forms: it could be state-initiated or state-facilitated.

State-initiated corporate crime [...] occurs, when corporations, employed by the government, engage in organizational deviance at the direction of, or tacit approval of said government. State-facilitated corporate crime [...] occurs when government regulatory institutions fail to restrain deviant business activities, either because of direct collusion between business and government or because they adhere to shared goals whose attainment would be hampered by aggressive regulation.<sup>38</sup>

Finland is the most forested land in Europe – about 75 percent of Finland is covered with forest. The economic importance of forests has always been great in Finnish history. The political-economic importance of logging here is undisputable, especially in the current economic situation. The Finnish government is grasping for possibilities to provide economic growth, and the forest industry provides for a substantial part of Finnish exports (18 % in 2022).<sup>39</sup> And now the predictions for the forest industry are promising growth, coinciding with growing amounts of logging.<sup>40</sup> Simply put, if you want growth in the forest industry, you have to increase logging.<sup>41</sup>

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<sup>38</sup> Kramer – Michalowski – Kauzlarich 2002, pp. 271–272.

<sup>39</sup> Metsien taloudellinen merkitys.

<sup>40</sup> Viitanen et al. 2024, p. 7.

<sup>41</sup> Riikilä 15.1.2025.

The new environmental minister of Finland, Sari Multala, announced that “the world will not be saved by stopping logging in Finland”, when asked about the possibility of the reduction of logging. The interviewer also noted that no remarkable actors have asked for a total ban of logging, but that many environmental activist groups have asked for a reduction to the same level as 15 years ago.<sup>42</sup> The Finnish government’s positive attitude towards logging can also be seen in its plans to demolish the advisory organ “climate panel”, that has constantly advised the government to cut the amount of logging.<sup>43</sup>

We believe that in the Hukkajoki case, the destruction of the mussels was an example of state-facilitated corporate crime. The destruction of the mussels was an inevitable outcome of the state’s and corporation’s quest for logging profits. There is a direct collusion between the Finnish forest industry and the Finnish government, and they both adhere to the shared goal of growing logging profits, that would be hampered by forest and environmental regulation that is too aggressive. This facilitation of environmental crime in the logging industry is achieved through acts of omission by the Finnish state.

### **3.3 Acts of omission**

We will focus on acts of omission as were defined by David Kauzlarich et al.<sup>44</sup> and further described by Rob White:

Acts of omission are acts that are formally illegal but, without adequate state resources directed at enforcement, are allowed to occur as a matter of course. Specific types of transnational environmental crime are basically linked in some way to the nature and extent of state intervention (or non-intervention), which in turn depends on the geographic location and political-economic importance of the specific activities in question.<sup>45</sup>

As pointed out in chapter 3.2, the political-economic importance of logging is immense in Finland. The geographical location of the activities in question lies within the Finnish borders, now even more than before with the diminishing imports of Russian wood due to import restrictions.<sup>46</sup> The importance of logging reflects on the nature of the intervention of the Finnish state on environmental crime in logging, which we argue is mostly non-

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<sup>42</sup> Pelli 24.1.2025.

<sup>43</sup> Eskonen – Orjala 22.1.2025.

<sup>44</sup> Kauzlarich – Mullins – Matthews 2003.

<sup>45</sup> White 2012, p. 130.

<sup>46</sup> Viitanen et al. 2024, p. 7.

interventional. Examples of acts of omission are the failed Forest Act and the PEFC certificate system.

### **3.4 Moments of rupture and regimes of permission**

Ignasi Bernat and David Whyte write in their joint paper “State-Corporate Crime and the Process of Capital Accumulation: Mapping a Global Regime of Permission from Galicia to Morecambe Bay” (2017) about how state-corporate crime is often viewed by only focusing on moments of rupture, like an oil spill or some other major environmental crime, when the actions that led to the moment of rupture were constant law-breaking over a longer period of time in a “regime of permission”. The regime of permission seeks the smooth and uninterrupted accumulation of capital with little regard for laws, human life or nature. In the case that a moment of rupture occurs, some low-level, usually outsourced companies and employees may face conviction, but the larger corporation benefiting from the situation can escape liability.<sup>47</sup>

Bernat and Whyte conclude their paper by saying that in state-corporate crime it is not the failure of a state to supervise the corporation that leads to these moments of rupture, but that they happen because corporations are acting within a regime of permission facilitated by the state. Instead of focusing on these moments of rupture, we should focus on the relationships between states and corporations that construct the regime of permission.<sup>48</sup>

Bernasi and Whyte also go much deeper into societal relationships between states and corporations than we will in this bachelor thesis, proposing an entirely different social structure than capitalism as an answer to the problems arising from the global regime of permission. We will not focus on the societal structures that enable the regime of permission. We simply propose that such a thing also exists in the Finnish logging industry and that Hukkajoki can be seen as a moment of rupture, a symptom of the underlying relationship between the state and the industry. We will call this “the regime of permission in the Finnish forest industry.”

We argue that the state has created this regime of permission in the Finnish forest industry through acts of omission. We believe that the Hukkajoki case is just the tip of the iceberg, and that such crimes occur on the constant. The thing that has made this case into a moment of

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<sup>47</sup> Bernat – Whyte 2017, p. 80.

<sup>48</sup> Bernat – Whyte 2017, pp. 83-84.

rupture is the large media outburst and public discussion. The fact that even such a largely publicized event doesn't seem to cause any real change in the state of forestry regulation hints to a deeply vested relationship between the state and the forest industry.

### 3.5 The imaginary social order

The imaginary social order is a concept by Frank Pearce. In essence, Pearce's definition of the imaginary social order is the illusionary description of a society in which the actual material realities of life underlying capitalism are obscured.<sup>49</sup> A. Alvesalo-Kuusi and L. Lähteenmäki have utilized this concept in their joint paper "The imaginary social order of corporate criminal liability" (2018), which explores work safety crimes in Finland. Alvesalo-Kuusi and Lähteenmäki base their article on their own study on corporate criminal liability in Finland. According to them, the study revealed that "the law, the legal decisions and their reasoning and the regulation and punishment of serious corporate malpractice are all a mere spectacle."<sup>50</sup> Their findings were in line with Pearce's view that such punishments only serve to "dramatize an imaginary social order."<sup>51</sup>

Despite the imaginary order, there are sometimes laws passed to prosecute corporations. But these acts of criminalization and prosecution are nothing but a spectacle to convince the people that also corporations have to follow the law. The true use of the criminalization is to further strengthen the imaginary social order.<sup>52</sup> In Finnish work safety crimes, Alvesalo-Kuusi and Lähteenmäki observed three ways in which the criminal justice system contributed to maintaining the imaginary social order: repeat offending was not taken into account properly, corporate punishments were much less severe when compared to punishments given to individuals for similar crimes, and there was a substantial amount of victim-blaming.<sup>53</sup>

As you can see the failed Finnish Forestry act and the PEFC system as acts of omission in which the Finnish state is facilitating corporate crime, you can also see how they construct an imaginary social order. In this imaginary social order, the Finnish Forestry act and the PEFC certificate system are robust rule structures that protect Finnish forests, corporations do their

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<sup>49</sup> Pearce 1976, p. 66.

<sup>50</sup> Lähteenmäki – Alvesalo-Kuusi 2018, p. 132.

<sup>51</sup> Pearce 1976, p. 93.

<sup>52</sup> Lähteenmäki – Alvesalo-Kuusi 2018, p. 131.

<sup>53</sup> Lähteenmäki – Alvesalo-Kuusi 2018, p. 135.

best to follow them and are really held accountable for infractions – the reality is to the contrary.

### **3.6 Compliance regulation**

The PEFC certificate is a form of compliance regulation or self-regulation.<sup>54</sup> Compliance regulation means that corporate activity is not regulated with a punitive threat of actual criminal sanctions for wrongdoing, but rather by cooperative strategies, in which the corporations regulate themselves. According to David Friedrichs, compliance approaches to regulation are often criticized by critical criminologists because they allow for corporations to get away with criminal wrongdoing, and they call for actual punitive action instead.<sup>55</sup> Rob White further declares that such approaches generally fail to acknowledge the structural imperatives of consumer capitalism, that is to expand and to create surplus value.<sup>56</sup> It is a fox as the guard of the henhouse –type of situation.

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<sup>54</sup> Cashore et al. 2005.

<sup>55</sup> Friedrichs 1996, pp. 272–273, pp. 314–315.

<sup>56</sup> White 2012, p. 135.

## 4 Case Hukkajoki as state-corporate crime

### 4.1 The regime of permission in the Finnish forest industry and the imaginary social order

In the Hukkajoki case, criminal investigation is ongoing, and only time will tell how Stora Enso will make it out of this predicament. For now, it would seem like a suitable solution for Stora Enso to blame the subcontractor for the crime - their own internal investigation has found the same subcontractor engaging in similar destruction of river pearl mussels in Kainuu.<sup>57</sup>

The penalization of the subcontractor and workers, while the bigger corporation escapes punishment, would fit into Bernasi's and Whyte's understanding of how moments of rupture are dealt with in a regime of permission.<sup>58</sup> The penalization of the worker and subcontractor instead of Stora Enso itself would also be helpful for the state and industry in strengthening the imaginary social order – on paper, the guilty parties would be punished, but in reality, the corporation responsible for the crime would escape unharmed. Business could go on as usual.

The construction of the imaginary social order can be seen in the way in which the case was portrayed in media and politics. The large media outrage about the crime itself satisfies the public call for punishment, but the media's neutral publishing of Stora Enso's explanations for the crime favours the corporation and makes it easier to shift the blame. On the political side, all major parties publicly condemned the actions of Stora Enso. But what have they actually done regarding the matter?

According to the biologist that originally spotted the criminal destruction of river pearl mussels in Hukkajoki, Myyri Sysivesi, the destruction of mussels is not unusual in the logging business in Finland – it is just lucky that she happened to witness it happening. She claims to have seen multiple traces of rivers inhabited by river pearl mussels being driven over.<sup>59</sup> One thing to back her claim is the similar crime found by Stora Enso's own internal investigation immediately after the Hukkajoki incident.

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<sup>57</sup> Ruonakoski et al. 6.9.2024.

<sup>58</sup> Bernat – Whyte 2017, p. 80.

<sup>59</sup> Ruonakoski 21.8.2024.

The key element in upholding the regime of permission in the Finnish forest industry and the imaginary social order is the state of the Finnish Forest Act. It is notably inefficient at preventing the destruction of forests, and it has been further weakened with the renewal of the law some ten years ago. According to environmental activists, unenforceable legislation has led to a situation where corporations constantly break it. They also claim that the industry is successfully preventing the state from raising simple, enforceable rules like the 50-meter buffer zone into status of written law and instead keeping them as recommendations.<sup>60</sup> The Forest Act is further discussed in chapter 4.2, and the buffer zone is discussed in the end of this chapter.

The surveillance of the following of environmental law in logging is mostly left to PEFC auditing companies, that are in close relations with the forest industry. According to Rob White, “At the centre of changes to environmental regulation has been the movement towards ‘corporate ownership’ of the definitions, and responses to, environmental problems.”<sup>61</sup> This seems to be what has happened with the practice of the PEFC certificate system in Finland, as is further explained in chapter 4.3.

After the Hukkajoki case there was a lot of public discussion about the buffer zone that is in place to protect rivers with river pearl mussel inhabitations – it is recommended not to cut down trees in the buffer zone next to the river. This rule is not written law but a recommendation from the Finnish Forest Centre.<sup>62</sup> Environmental activists have asked after Hukkajoki for it to be written in law, and that at the very least the state would follow its own recommendation in loggings done by the state-owned forestry corporation, Metsähallitus.<sup>63</sup>

The intertwining of the interests of the state and forestry corporations and how their relationship is constructing the regime of permission in the Finnish forest industry is best exemplified by the political conversation on the 50-meter buffer zone around rivers where freshwater pearl mussels are known to live. This buffer zone would protect their habitat from excess sunlight and pollution of the water. The reluctance to transform this guideline into binding, enforceable and punishable law best shows the extent to which economic interests

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<sup>60</sup> Greenpeace 26.8.2024; Kuresoo 13.11.2024.

<sup>61</sup> White 2012, p. 135.

<sup>62</sup> Metsien käsittely jokihelmisimpukka- eli raakkualueilla.

<sup>63</sup> Riittävät suojavyöhykkeet ovat välttämättömiä valtion mailla.

continue to outweigh ecological considerations. This should come as no surprise, since the political forces needed to enact such a change simply don't exist at the moment.

The now former environmental minister Mykkänen has voted against such actions in the past, before his role in the government. He also politely asked the forestry industry to sign a pledge to honor the voluntary guideline, which Stora Enso immediately did. This of course would have been a more credible statement, had the company not already stated to follow such guidelines before.<sup>64</sup> The debate for implementing the buffer zone into written law started long before the Hukkajoki incident.

The discussion around the 50-meter buffer zone after Hukkajoki is a political dance between the Finnish public, the government and the forest industry. To favour the outraged public immediately after the events took place, environmental minister Mykkänen announced plans for a new, strict law to make the buffer zone mandatory.<sup>65</sup> But after waiting for a little time, and a private meeting with industry representatives, the minister announced that there isn't any need for a stricter law after all – the corporations are going to abide to the rule voluntarily.<sup>66</sup> This sort of a game-changing private audience with the environmental minister hints to a deep collusion between state and industry.

Through this political dance the public got the message, that Finnish forestry corporations care about the environment and are willing to abide to this new rule. The catch is, that the rule is nothing new – this recommendation should have been adhered to by the corporations in the first place. People that actually are knowledgeable about the matter – forest owners and environmental activist groups – are dissatisfied.<sup>67</sup> But the public outrage has been satisfied, and the corporations don't have to worry about new, aggressive regulation hampering their profits.

According to Sari Myllyoja from the Kainuu Centre for Economic Development, Transport and the Environment (ELY-centre), the fact that the buffer zone is not written law but a recommendation, does not matter – even without specific instructions given by the ELY-centre, as were given to Stora Enso in Hukkajoki, these recommendations should be followed because they are based on law. Sari Myllyoja states that she believes that most of the time, the

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<sup>64</sup> Elonen 2024.

<sup>65</sup> Tolkki 10.9.2024.

<sup>66</sup> Piirainen 10.9.2024.

<sup>67</sup> Aaltonen 10.9.2024.

legal requirements given for logging are fulfilled.<sup>68</sup> We think that her belief is built on the imaginary social order, rather than fact. Almost instantly after the Hukkajoki incident, there came to light another logging by a river with endangered mussels, where the buffer zone recommendation was not followed – this time the contractor was not a private corporation, but instead Metsähallitus, owned by the state itself.<sup>69</sup>

It seems to us that the Finnish government is turning a blind eye to environmental crimes committed by Stora Enso and the forest industry, with its other eye on the profits to be made from logging. Logging is constantly done in violation of Finnish law despite the forests (and wildlife including mussels) being protected on paper. Therefore, the Finnish state, Stora Enso and the forest industry are engaging in state-corporate environmental crime in the logging industry through acts of omission. It seems that the main purpose of the Forest Act and the PEFC certificate system is not to protect the forests, but to uphold the regime of permission in the Finnish forest industry and to create an imaginary social order.

#### **4.2 The Forest Act as an act of omission and the Nature conservation Act**

The protection of forest nature is implemented by legislation under the Forest Act and the Nature Conservation Act. The aim of the amendment of the Forest Act was to increase forest owners' decision-making power over the use of their forests and to have a positive impact on forest management and biodiversity.<sup>70</sup> Former ELY-centre official now turned environmental activist, Taina Ihaksi, sees it differently: she argues that weak legislation causes environmental problems and provides an unfair competitive advantage that harms responsible operators. The disadvantages of short-sighted practices eventually impact society as a whole.<sup>71</sup>

According to the Forest Act, forests must be managed and used in such a way as to safeguard the general conditions for the preservation of habitats important for forest biodiversity. In practice, however, this obligation has little significance. It is vaguely defined, making it difficult to determine when it has been breached. Additionally, compliance is not monitored, making enforcement impossible. Consequently, the provision functions more as a

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<sup>68</sup> Pitkänen 23.8.2024.

<sup>69</sup> Liimatainen 6.9.2024; Kinnunen – Heikinmatti – Korkala 7.9.2024.

<sup>70</sup> UPM Metsä.

<sup>71</sup> Baltic Sea Action Group 2024.

recommendation rather than an enforceable rule, similar to other general obligations. Without a control mechanism, regulation loses its effectiveness.<sup>72</sup>

Under the Forest Act, proving a forest crime requires evidence of gross negligence or intentionality. Similarly, sentencing for a nature conservation crime under the Criminal Code requires proof of gross negligence or intent. Generally speaking, in the light of legal literature and case law, the characteristics of gross negligence and intentionality are not met very easily. The case at hand is being investigated specifically as an aggravated nature conservation crime under the Criminal Code, the characteristics of which can be found in the Nature Conservation Act. This probably indicates that, under the Forest Act, it is not worthwhile to prosecute the case and one must rely on the Criminal Code and the Nature Conservation Act, even though the purpose of the Forest Act is to protect forests.

We argue that the preventive effect of the Forest Act is weak or even non-existent, and even if the legal process progresses to a conviction for a nature conservation crime, natural disasters have already arisen. From the nature's point of view the largest issue of the legislation is that by the time the legal proceedings take place, valuable natural sites have already been destroyed, and such destruction cannot be undone by court rulings, fines or convictions.

### **4.3 Compliance regulation as an act of omission**

PEFC certification requirements include preserving forest diversity, maintaining forest health and growth, and allowing for recreational use. Specific measures include leaving buffer zones along watercourses and open fields, where only selective logging is permitted.<sup>73</sup> Even though the forest in the Hukkajoki case was not PEFC-certified, Stora Enso claims to follow PEFC certificate requirements in all of its activities,<sup>74</sup> including the Hukkajoki logging.<sup>75</sup>

According to a study conducted by Jyväsjärvi et al. in the University of Oulu in 2020, PEFC certificates are not enough to protect stream ecosystems, like the mussel river in Hukkajoki. It calls for stricter regulation to make sure of the biological sustainability of forestry. The study bases its results on comparing conditions between nature-state rivers and rivers, where there had been PEFC-certified logging. The results suggest that PEFC-compliant safe zones around

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<sup>72</sup> Similä et al. 2022, p. 78.

<sup>73</sup> Mikä on PEFC?.

<sup>74</sup> Lehtonen 2023, p. 15.

<sup>75</sup> Kaivanto 27.8.2024.

protected rivers are not enough to support ecosystem conditions at a comparable level to natural conditions.<sup>76</sup>

Another study by Saari et al. from 2024, studying the changed interpretation of the Finnish Forest Act, claims that although PEFC certificates require a 5-10-meter buffer zone around streams, and the stricter, FSC-certificate requires a 30-meter buffer, both still allow selective logging within these zones, and ecological effectivity is often compromised. These zones are left minimal for economic reasons, especially in PEFC-certified forests.<sup>77</sup> It also claims that a rather high proportion of the sites studied were most likely criminally harvested according to the Forest Act.<sup>78</sup>

Both of these studies found FSC-certification to be slightly more promising than PEFC-certification – FSC is in essence a stricter version of PEFC. PEFC certification covers 18,5 million hectares, or more than 90% of production forests in Finland. FSC covers about 2,3 million hectares, or 10% of production forests in Finland. But, because most of the FSC-certified areas are also covered by PEFC, that leaves roughly 1,1 million hectares of Finnish commercial forest, that is not covered by any certificate.<sup>79</sup> Because 90% of Finnish production forest is only protected by the PEFC certificate (in addition to the failed Forest Act), we will focus on PEFC certification.

Quickly after Hukkajoki, Iltalehti released an interview with Timo Pukkala, a forest owner and a strong critic of the PEFC certification system. Timo Pukkala is an emeritus professor in the school of forest sciences, University of Eastern Finland.<sup>80</sup> In the interview, Pukkala expressed his disbelief in the system. He points out, that the destruction of biodiversity is continuing at the same rate today, as it was before the introduction of PEFC certification. According to him, the certificate requirements should be tightened extensively. The forest industry would lose a small part of profits from this, but for example the saw industry would not be affected at all. But even this small loss of profits is, according to Pukkala, the reason why ”certain entities” don’t want the certificates to be tightened.<sup>81</sup>

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<sup>76</sup> Jyväskylä – Koivunen – Muotka 2020.

<sup>77</sup> Saari – Peura – Halme 2024, p. 378.

<sup>78</sup> Saari – Peura – Halme 2024, p. 386.

<sup>79</sup> Saari – Peura – Halme 2024, p. 378.

<sup>80</sup> Timo Pukkala.

<sup>81</sup> Erämaa 31.8.2024.

The following of PEFC and FSC certificate rules is enforced in Finland through audits by private companies, and the certificate holders choose the auditors themselves.<sup>82</sup> Yle MOT filmed a documentary in 2023<sup>83</sup> digging into the problems with this self-regulative practice. The documentary was filmed as part of an ICIJ (International Consortium of Investigative Journalists) investigation<sup>84</sup> with 40 participating media outlets from 27 countries. The general outcome of the investigation was that on an international level, environmental crimes, illegal logging and even wood smuggled from conflict areas were left unnoticed by the auditors of PEFC certificates. A feature special for Finland seems to be that the strong forest industry has managed to modify the Finnish PEFC rules so, that violations of the certificates are mostly not noted.

One of the main concerns with the certification system in Finland is that significant deviations from certification requirements should result in certification loss, but this rarely happens. Research data is often ignored, criteria are not met, and standards are sometimes weakened. While PEFC's purpose is to protect biodiversity, habitats, and carbon sinks, it does not always uphold these principles when revising criteria. The certification claims to exceed legal requirements in protecting nature, but only in principle. In practice, violations or deviations from certification requirements may become outdated before they are addressed, and cases rarely result in enforcement actions.

Compliance with certifications is monitored by audit firms, but these firms often lack knowledge of environmental damage and violations. Additionally, they do not report police investigations or forest destruction as certification violations. Infractions only appear in reports if confirmed by a district court decision, meaning that without convictions, no official record of deviations exists. As a result, public accountability reports remain unblemished. Although certification rules require reporting deviations, this is not done in practice. The forest sector has shaped the rules to ensure that violations are difficult to recognize or enforce. By modifying regulations, the industry effectively conceals infractions. Ultimately, the forest industry audits itself, with decision-making power and rule enforcement remaining undivided.<sup>85</sup>

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<sup>82</sup> Skön 6.3.2023.

<sup>83</sup> MOT: Tuhotun metsän tarina - käsikirjoitus 2023.

<sup>84</sup> Deforestation Inc.

<sup>85</sup> MOT: Tuhotun metsän tarina - käsikirjoitus 2023.

Also, according to Yle MOT, even in cases where there is a court conviction of environmental crime, the Finnish auditors have not noted these as violations in the certificates. Stora Enso also has got a conviction, that has for one reason or the other not been noted in its PEFC certificate – this is of course prior to the Hukkajoki case. It seems, that on one hand, the certificate system has been purposefully modified in Finland by the forest industry to better fit their needs, and on the other hand, even when violations should be noted according to the rules of the certificates, they are hidden by auditors.

The Hukkajoki case also highlights one of the biggest problems of the PEFC certificate system: in theory, the certificate holder must adhere to law, but based on art. 6.3 of the requirements, there has to be a court conviction for a violation to be noted in the certificate.<sup>86</sup> It therefore does not, for example, require the certificate holder to follow the lawful instructions given by the local ELY-centre. No violation of these instructions will affect Stora Enso's certificate without a conviction. In Hukkajoki the ELY-Centre gave Stora Enso specific instructions to not drive over the mussels, to ensure that no wood or earth material from the logging will end up harming the mussels, and that Stora Enso should leave a forested zone of 45 meters next to the river.<sup>87</sup>

It appears that the PEFC certificate could not have prevented the crime in question, when we take into account Myyri Sysivesis' claim that these rivers containing freshwater pearl mussels are constantly being driven over, the questionable efficiency of the certification system according to studies and the professional account of Timo Pukkala, and the problematic self-regulation involved in the auditing system. Additionally, Stora Enso, claiming to follow PEFC certification rules even when the forest in question was not certified, still put the route for transporting logs in the official logging plan straight through the river on a hotspot for the mussel population.<sup>88</sup> It seems to us, that these certificates are more of an act of greenwashing than rules to be taken seriously by the logging industry.

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<sup>86</sup> Sustainable forest management – Requirements.

<sup>87</sup> Pitkänen 23.8.2024.

<sup>88</sup> Pelli – Niskakangas 9.9.2024.

## 5 Conclusions

The destruction of the river pearl mussels in the Hukkajoki River represents a significant case study in state-corporate environmental crime. It highlights not only the direct environmental harm caused by industrial negligence and carelessness but also the systemic failures in regulatory oversight, legal accountability, and corporate governance within the Finnish forestry sector. By applying state-corporate crime theory, this bachelor thesis attempts to understand how the relationship between the Finnish government and major forestry corporations, particularly Stora Enso, has created a regime of permission in the Finnish forest industry that allows environmental harm to occur with minimal repercussions.

Our first research question was “Is the Finnish state practising state-corporate environmental crime in collaboration with the forest industry?”

From a legal perspective, the investigation into this incident as an aggravated nature conservation crime points out the challenges of meaningfully enforcing environmental protections in corporate settings. While financial penalties and restoration requirements have been imposed, meaningful accountability — especially at the executive level — remains elusive. The corporate veil continues to effectively shield decision-makers from criminal charges and direct liability, reducing the likelihood of substantive consequences that would serve as real deterrents for future infractions. The structural barriers within Finland’s legal and regulatory frameworks, including the inefficacy of compliance-based forestry regulations such as PEFC certification, further magnify the issue by enabling corporations to operate with relative impunity. Yes, the Finnish state is practising state-corporate environmental crime in collaboration with the forest industry.

Our second research question was “What is the role of the Finnish state in enabling the destruction at Hukkajoki, and could it have been prevented, if the forest had been PEFC certified?”

The case illustrates a broader pattern of state-corporate complicity. The weakening of the Finnish Forestry Act, the lack of enforceable conservation measures, and the self-regulatory nature of forestry certifications all point to a systemic issue where environmental protection is subordinated to economic interests. The failure to uphold existing regulations, coupled with insufficient legal consequences, has created a culture of carelessness and recklessness and a

regime of permission in industrial forestry operations, making incidents like Hukkajoki not just possible, but inevitable. Because of reasons outlined in chapter 4.3, we also don't believe that the destruction at Hukkajoki could have been prevented, had the forest been PEFC certified.

Our third research question was “How was the case represented in various public discussions, and what impact, if any, did they have on regulatory ambitions and practices?”

In media, the case has been presented with strong criticism towards the actions of Stora Enso, questioning also the effectivity of environmental protection measures in place in the logging industry. In contrast, the explanations for the causes of the destruction given by Stora Enso have been publicized in a neutral tone. The political reaction has been strong, with near-universal condemnation from political parties. Former environment Minister Kai Mykkänen's demand that Stora Enso fully fund the restoration reflects the gravity of the situation. The Green Party, in particular, has advocated for stricter legislative protections, including expanding conservation areas and enforcing mandatory buffer zones around rivers housing freshwater pearl mussels. However, whether these political responses will translate into meaningful policy changes remains uncertain, as corporate interests have historically influenced environmental regulation globally, and Finland is no exception.

Moving forward, addressing these issues requires a multi-faceted approach. First, legal reforms should be enacted to hold corporations and their executives directly accountable for environmental harm, including the possibility of criminal liability for decision-makers. Second, independent oversight mechanisms must replace self-regulated compliance models like PEFC certification to ensure genuine enforcement of environmental standards. Third, media and civil society organizations must continue to apply pressure to expose corporate misconduct and advocate for stronger protections for Finland's fragile ecosystems. Finally, political will is needed to shift from conciliatory engagement with the forestry industry to a more confrontational stance that prioritizes ecological sustainability over short-term economic gains.

While formal oversight and regulatory frameworks mentioned above are essential, they are usually insufficient by themselves to effectively fight against state-corporate crime. The successful stifling of organizational misconduct relies less on official channels and more

significantly on bottom-up processes. This includes robust social movements, active grassroots initiatives, persistent investigative journalism, and most importantly, open and democratic engagement in political decision-making.<sup>89</sup>

Case Hukkajoki serves as an important reminder that environmental crime is not an isolated event, a moment of rupture, but a symptom of deeper structural issues within state-corporate relations. Unless substantive changes are made, the patterns of ecological destruction, weak enforcement, and corporate impunity will continue, with dire consequences for biodiversity and the environment.

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<sup>89</sup> Kramer – Michalowski – Kauzlarich 2002, p. 279.