Abstract

This thesis introduces the reader to the highly complex field of international environmental harms. This area of international law takes up a significant portion of the overall natural degradation of the planet, but still remains on the outer slopes of attention and concern within the international community of states. Given the significance of a healthy environment in general it is of utmost importance that international environmental crimes receive more attention to put an end to the thriving environmental destruction.

The first chapter introduces into the complex topic and reveals the threat potential of international environmental harms. The second part approaches the current situation of legal handling regarding international environmental harms. The third chapter then raises the question, whether and how criminalisation can be a calming factor for this problem. The following parts explore possible international fora to handle international environmental crimes more properly in the future. The options to rely on the existing International Court of Justice and the International Criminal Court or to create a potential International Court for the Environment and a World Environmental Organisation will be examined carefully.

This work outlines that international environmental crimes should not be taken lightly, as they largely affect the global community as a whole. For an effective way to combat international environmental crimes a centralised comprehensive approach on the international level is needed. Within the range of intergovernmental organisations and international courts a fictional new World Environmental Organisation and the existing International Criminal Court shine out. Therefore the foundation of a World Environmental Organisation as well as an “environmental reformation”, to explicitly open up the court's jurisdiction for international environmental crimes, of the International Criminal Court are being promoted as vital to get international environmental crimes under control.

Words

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# Table of Content

<table>
<thead>
<tr>
<th>Abstract</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>III</td>
</tr>
<tr>
<td>Table of Content</td>
<td>IV-VIII</td>
</tr>
</tbody>
</table>

## Introduction

1. **Chapter One** – International Environmental Harm – *Why is there a need to pay more attention to international environmental harm?* 4-28
   1.1 Introduction 4
   1.2 The complexity of international environmental crimes 5
      1.2.1 Stakeholders involved in international environmental harm 6
      1.2.2 Internationality of international environmental harm 7
      1.2.3 Impacts of international environmental harm 8
         1.2.3.1 Environmental consequences 9
         1.2.3.2 Effects on humans 10
         1.2.3.3 Effects on the economy 11
         1.2.3.4 Political repercussions 12
      1.2.4 Drivers of international environmental crimes 13
         1.2.4.1 Low-risk high-profit structure 13
         1.2.4.2 Economic greed 14
         1.2.4.3 Lack of concern for the environment 15
         1.2.4.4 Corruption 16
         1.2.4.5 Poverty 16
      1.2.5 Entanglement with other areas of international crime 17
         1.2.5.1 The cross-cutting nature of international environmental crimes 17
         1.2.5.2 Murder, terror and human rights violations 18
   1.3 Areas of international environmental crimes 19
      1.3.1 Wildlife crimes 20
         1.3.1.1 Illegal trade in wildlife 20
         1.3.1.2 Whaling 22
      1.3.2 Illegal trade in ozone-depleting substances 23
      1.3.3 Transboundary pollution 24
   1.4 Conclusion 27

2. **Chapter Two** – Existing Paradigm – *Is enough currently done at the international level to respond to international environmental crimes?* 29-59
   2.1 Introduction 29
   2.2 What is the current paradigm in regards to international environmental crimes? 30
      2.2.1 The relationship between international environmental crimes and classic criminology 30
2.2.2 Stakeholders involved in combatting international environmental crimes

2.2.2.1 States
2.2.2.2 Intergovernmental organisations
2.2.2.3 Non-governmental organisations
2.2.2.4 Private sector
2.2.2.5 Stakeholders in total

2.2.3 International environmental crimes within the international environmental law regime

2.2.3.1 Current legal status of the environment
2.2.3.2 Multilateral Environmental Agreements
   2.2.3.2.1 CITES and ICRW
   2.2.3.2.2 Montreal Protocol
   2.2.3.2.3 Basel Convention
   2.2.3.2.4 Other relevant agreements and sources
2.2.3.3 The involvement of human rights in international environmental crimes
   2.2.3.3.1 Environment and human rights
   2.2.3.3.2 The human right to a healthy environment
2.2.4 Enforcement regarding international environmental crimes

2.3 Projects targeting international environmental crimes

2.4 International jurisdiction in regards to international environmental crimes

2.5 Conclusion

3. **Chapter Three** – The idea of criminalisation – *How could international jurisdiction of international environmental crimes fit in the landscape of international law?*

3.1 Introduction
3.2 The need to involve international bodies
   3.2.1 A new form of global crime
   3.2.2 The problem of nationalism
   3.2.3 The need for international governance
3.3 Can criminalisation stop or reduce the harm?
   3.3.1 The role of criminalisation
   3.3.2 Criminalisation versus legalisation
   3.3.3 Sanction methods for international environmental crimes
   3.3.4 Criminalisation as a solution
3.4 The definitional dilemma
   3.4.1 The general importance of a definition
   3.4.2 Key terms within the sphere of international environmental crimes
   3.4.3 Ecocide
   3.4.4 International environmental crimes
      3.4.4.1 Different definitions in use
      3.4.4.2 Anthropocentric, biocentric and ecocentric approaches
   3.4.5 The relationship between ecocide and international environmental Crimes
3.5 Potential forum for the jurisdiction of international environmental crimes 78
3.6 Conclusion 81

4. Chapter Four – The International Court of Justice – Can the International Court of Justice play a role in combating international environmental crimes? 83-88
4.1 Introduction 83
4.2 The International Court of Justice's obligation to the environment 83
4.3 Dual jurisdiction of the International Court of Justice 85
4.3.1 Jurisdiction in contentious cases 85
4.3.2 Advisory jurisdiction 86
4.4 Limitations of the International Court of Justice 87
4.4.1 Criminal charges in front of the International Court of Justice 88
4.5 Conclusion 88

5. Chapter Five – Reformed International Criminal Court – Could a reformed International Criminal Court offer a solution for the problem of international environmental crimes? 89-114
5.1 Introduction 89
5.1.1 The current role of the Rome Statute 89
5.1.1.1 The preamble of the Rome Statute 90
5.1.1.2 Article 5 (1) of the Rome Statute 91
5.1.1.2.1 Genocide 91
5.1.1.2.2 War crimes 93
5.1.1.2.3 Crime of aggression 93
5.1.1.2.4 Crimes against humanity 95
5.1.1.2.5 Environmental links under article 5 (1) of the Rome Statute 97
5.1.1.3 Article 8 (2) (b) (iv) of the Rome Statute 97
5.1.1.3.1 The difficulty of article 8 (2) (b) (iv) of the Rome Statute 98
5.1.1.3.2 Article 8 (2) (b) (iv) of the Rome Statute in the light of the Geneva Additional Protocol I and the Environmental Modification Convention 99
5.1.1.3.3 The practical use of article 8 (2) (b) (iv) of the Rome Statute 100
5.1.1.4 Policy Paper on Case Selection and Prioritisation 101
5.2 Environmental reformation of the International Criminal Court 103
5.2.1 What would a “green” International Criminal Court look like? 104
5.2.1.1 Ecocide as fifth crime under article 5 (1) of the Rome Statute 105
5.2.1.2 Further notable amendments for a green International Criminal Court 107
5.2.1.3 Possibility of amendments of the Rome Statute 109
5.2.2 What would be the benefits of an environmental reformation of the International Criminal Court? 110
5.2.3 What would be the challenges of an environmental reformation of the International Criminal Court? 111
5.3 Conclusion

6. Chapter Six – The International Court for the Environment – Can this new fictional institution offer a solution for the problem of international environmental crimes? 115-142

6.1 Introduction 115

6.2 How might an International Court for the Environment look? 115

6.2.1 The development of the idea of an International Court for the Environment 116

6.2.2 What is behind the idea of an International Court for the Environment? 118

6.2.3 Draft Statutes for the International Court for the Environment 121

6.3 What would be the advantages of a new International Court for the Environment? 123

6.3.1 Judicalisation 124

6.3.2 Freedom of definition 125

6.3.2.1 What is the opportunity of a new definition in this context? 126

6.3.2.2 How should international environmental crimes be defined under the International Court for the Environment? 128

6.3.2.2.1 Definition of “international” 128

6.3.2.2.2 Definition of “environmental” 130

6.3.2.2.3 Definition of “crime” 132

6.3.2.2.3.1 Crime and international crime 132

6.3.2.2.3.2 Victims of international environmental crimes 133

6.3.2.2.3.3 Actus reus 134

6.3.2.2.3.4 Mens rea 135

6.3.2.2.3.5 Ecocentrism as anchor 136

6.3.2.2.4 Definition of “international environmental crimes” 137

6.4 What would be the challenges of establishing a new International Court for the Environment? 139

6.5 Conclusion 141

7. Chapter Seven – The World Environment Organisation – Why is a World Environment Organisation desirable in the context of international environmental crimes? 143-152

7.1 Introduction 143

7.2 What could a World Environment Organisation look like? 144

7.2.1 UNEP as a base of the new World Environment Organisation 144

7.2.2 Unique characteristic of the World Environment Organisation 144

7.2.3 Tasks of the World Environment Organisation 145

7.2.4 Dispute Settlement Body within the World Environment Organisation 147

7.3 How would a World Environment Organisation be a useful addition to the jurisdictional for international environmental crimes? 149

7.4 Why is there a need for a World Environment Organisation? 150
7.5 Potential hurdles in the creation of a World Environment Organisation

7.6 Conclusion

8. Chapter Eight – Conclusion – What is the most preferable and suitable solution in combatting international environmental crimes via jurisdictional institutions? 153-156

8.1 The options for combatting international environmental crimes in the future 153

8.2 Preferable solution to fight international environmental crimes via legal means on international level 154

8.3 The call for international environmental criminal law 156

Bibliography IX-XXV

A. Cases and Resolutions IX
B. Legislation IX
C. Treaties and Conventions X
D. Official publications and reports XI
E. Books XIII
F. Chapters in Books XV
G. Journals XVII
H. Internet Resources XXII
I. Other XXV
“Guilty or not guilty” is one of the most central questions in criminal law in general. Guilt is needed to judge someone’s acts as a crime. Guilt is thus a major component of criminology. However, the determination of guilt in a criminal sense in international cases relating to environmental harm still causes huge uncertainty. International environmental crimes are not a form of classic criminology and it is debatable, whether, for example, the Deepwater Horizon oil spill in the Gulf of Mexico in 2010 or the involvement of Royal Dutch Shell in the contamination of the Niger Delta during the 1990s can even be named criminal activities and therefore to determine criminal guilt. But at least it is debatable. Given the importance of a healthy environment it has to be debated in depth.

This discussion is urgently needed to pursue mitigation of human impact on the Earth’s environment. International environmental law itself is quite a young “project” of the community of states, but in the course of the last decades the international framework for environmental protection has started growing immensely. However, despite the disastrous impacts of international environmental harm there is no internationally coordinated answer and not even a universally agreed upon definition of the term “international environmental crime”. Moreover, international environmental law itself is already a complex self-contained regime within international law, but is unfortunately characterised by soft regulation, soft enforcement and soft compliance. There is still a lot of work to do to find a strong answer to this pressing global problem of international environmental crimes.

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1 Guilt is defined as “the fact of having committed a specified or implied offence or crime” (Guilt” Oxford Dictionary <www.oxforddictionaries.com>).
5 OECD, above n 2, at 14.
numerous reasons for the flourishing degradation of the natural environment on the planet, of which international environmental crime is making up a growing proportion. The acts in question are in fact a combination of various different actions with huge economical, political, social, environmental, and also international security related, impacts. They are often followed or accompanied by other serious misdemeanours like money laundering, bribery, or even murder. The problem of international environmental crime is therefore a juggling act between individuals, criminal organisations, governments, intergovernmental organisations, non-governmental organisations (NGOs) and the global human community. States cannot hide behind their own national laws or borders to fight environmental crimes, because the environment is the basis of all life and central to human existence. In the end, international environmental harm affects the world as a global community and not only a specific person or a group of persons. This is why preventing and responding to these crimes is one of the most pressing challenges of the current time.

This thesis primarily aims to discuss the classification of international environmental harms in the context of international environmental criminal law and the suitability of adjudicating them on an international level in the future.

To address the complexity of international law this thesis is split into eight chapters. The first chapter provides an overview of the problem and addresses the threat international harmful behaviours pose to the international community of states. The second chapter talks about the existing response to environmental harmful activities that could already be classified as international environmental crimes. The third part discusses how international criminalisation can help to solve the problem of widespread

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6 Nellemann and others, above n 3, at 4.
7 Christelle Himbert “A comprehensive approach to combating the criminal networks behind environmental crime” (2014) 51 UN Chronicle 20 at 20; Nellemann and others, above n 3, at 7.
8 Nellemann and others, above n 3, at 9, 58.
international environmental harm. Chapters four to seven introduce and discuss the suitability of currently existing or potential institutions for the handling of environmental harmful acts on the international level. This part aims to reveal whether there is an existing legal body, which is suitable to have the jurisdiction to hear prosecutions for international environmental crimes, or whether there is a possibility of establishing a new independent and specialised International Court for the Environment (ICE) in addition to the existing international courts. The establishment of a World Environment Organisation (WEO) as supervisory agency will also be considered. This thesis ends with a final statement by the author concerning the outcome of this study.
Chapter One

International Environmental Harm

Why is there a need to pay more attention to international environmental harm?

1.1 Introduction

The Napalm bombardment of the Vietnamese jungle during the Vietnam War, the Deepwater Horizon oil spill in the Gulf of Mexico, ivory trade between Africa and Asia, worldwide trade in ozone-depleting substances (ODS), or smuggling of genetically engineered plants present historic, current and potential future repercussions with the potential to qualify for international environmental crimes. These events are deemed to be the most vicious threats to our planet and our society, but international environmental crimes still seem to be on the periphery of international law. Despite the fact that during the last few decades the international legal framework regarding environmental protection has grown, criminalisation of environmental harm is largely ignored by international law. International environmental harms are low on the priority list of the international community and are often seen as folk or petty crimes without any real victims, but this chapter will show that they are most certainly neither petty nor victimless.

The framework question for this introductory chapter asks whether there is a need to pay greater attention to international environmental harm and is there a necessity to “criminalise” international environmental harms, especially

13 Nellemann and others, above n 3, at 41.
15 Freeland, above n 14, at 119; OECD, above n 2, at 14.
16 Lynch and Stretesky, above n 10, at 13; Banks and others, above n 9, at 1.
the ongoing non-compliance with existing international environmental agreements. Given the diverse spectrum of acts harming the environment, the first section of this thesis aims to convey the sophistication and range of environmentally harmful acts. To understand the difficulties involved in setting up an international regime for trying international environmental crimes, it is necessary to acknowledge the immense scope of the activities that could be criminalised, as well as the justification for criminalising them.

1.2 The complexity of international environmental crimes

The sphere of harmful acts related to the global environment is enormous. It would therefore be foolish to examine international environmental harm only from one angle. In contrast to other (potentially) criminal harm, environmental harm has some outstanding peculiarities.

Environmental harms potentially cover a much broader range of consequences and the interdependence of all species in one giant ecosystem has to be taken into account. Involvement of various stakeholders, such as governments or criminal syndicates, drivers connected to poverty and greed, impacts ranging from minor local effects to massive global problems, links to economic, social, humanitarian and safety related consequences, ties to other criminal areas and a dynamic development in general characterises international environmental crimes. The main peculiarity is probably the possibility of harm towards everyone and everything. It is vital to balance the complex relationship between humans and nature. It might sound exaggerated, but the survival of the human race is what is ultimately at stake here. One way or another the environment will outlast humankind, but humans may not be able to adapt to the new living conditions created, inter alia, by anthropogenic international environmental harms.

Metaphorically speaking the problem of environmental degradation through potentially criminal actions is like storing several electric cables in a drawer. By the time one of the cables is needed they will be badly snarled. It is impossible to loosen them by simply pulling on one end. To solve the issue it is necessary to work with all given ends. At this point we are thinking of opening

17 Berat, above n 2, at 343; Lynch and Stretesky, above n 10, at 1.
the drawer and contemplating untangling the mess we have created. The law shall help in trying to determine which strings to pull and push and therefore lead the way to a final solution.

1.2.1 Stakeholders involved in international environmental harm

The perpetrators of potential international environmental harms are as varied as the acts itself. They range from individuals to corporations or criminal networks, and often include state officials or governments.

The Environmental Investigation Agency (EIA) showed in their 2012 report on illegally harvested timber the interweaving of Chinese state owned companies with imports of illicit timber.\textsuperscript{18} State actors often use the trade of illegal timber to finance their authoritarian regimes.\textsuperscript{19} This is likely to happen in countries with a history of crimes on state levels, such as Zimbabwe or Cambodia.\textsuperscript{20}

Criminal syndicates play an enormous role in international environmental harm. The environmental sector has become a significant part of the worldwide network of organised crime.\textsuperscript{21} Colombian cartels are involved as well as the Italian Mafia and several other small or big transnational criminal consortia.\textsuperscript{22} International operating syndicates diversify their classic business in trafficking drugs or arms to make extra money.\textsuperscript{23}

Next to these shadow organisations there are big corporations tangled in the net of international environmental harm.\textsuperscript{24} This can be observed, for example, in the carbon trade sector and its interweaving with the financial market.\textsuperscript{25} Often multinational corporations obtain natural resources from terror

\textsuperscript{18} Environmental Investigation Agency \textit{Appetite for destruction - China’s trade in illegal timber} (EIA, London, 2012) at 8, 10.


\textsuperscript{20} At 98.

\textsuperscript{21} Nellemann and others, above n 3, at 7.


\textsuperscript{23} Nellemann and others, above n 3, at 65.

\textsuperscript{24} At 69; \textsuperscript{25} INTERPOL \textit{Guide to carbon trading crime} (INTERPOL, Lyon, 2013) at 11.

\textsuperscript{25} INTERPOL, above n 23, at 13.
groups.26 This leads to another frightening stakeholder in the sphere of international environmental harm; terror regimes.27 Terror groups are deeply involved in trade with illegally exploited natural resources to finance their cause, as pointed out by the United Nation Security Council (UNSC).28

1.2.2 Internationality of international environmental harm
Clearly international environmental harm has developed to global significance.29 Environmental harms are generally not restricted by any border fences.30 But it is hard to determine when environmental harm leaves national borders and grows into an international one.

Environmental harm, no matter where it occurs, has a global impact.31 To seriously be considered as a global impact the scope and scale of the environmental harm has to pass a certain hurdle; it needs to be significant. The use of ODS destroys the Earth’s shield against the Sun’s power, which, for example, results in a worldwide increase in the risk of skin disease and decreasing plant productivity.32 Illegal logging exacerbates deforestation and is closely linked to climate change.33 Wildlife trade threatens to exterminate rare species worldwide.34 Mistreatment of waste contributes to the severity of pollution in oceans. Garbage, polluting the water, is transported into the oceans via waterways or wind transforming it from a national problem to an international one.35 This problem is alarming with between five and 13 million tonnes of plastics are estimated to enter the oceans each year from land.36 Even if most of the industrial pollution is created in areas with a high level of

28 e.g. the Islamic State; United Nation Security Council Resolution S/RES/2170 (2014).
29 South, above n 11, at 214.
31 Banks and others, above n 9, at 3.
32 At 3.
33 At 6.
36 At 3.
population, traces of modern industry emissions can be found in remote areas of the world.\(^{37}\) One of the first holes in the ozone layer was discovered above Antarctica, where no industry is located at all.\(^{38}\)

An up-to-date example at this stage is the use of the “slash-and-burn”-method to clear rainforest in Indonesia for plantation purposes. This way of generating areas for cultivation is forbidden under Indonesian law, because of the disastrous environmental impact, but is still widely used in the agriculture industry.\(^{39}\) As a result of this “slash-and-burn” method, the air quality in neighbouring countries deteriorates rapidly, exposing the population to serious health risks and even causing deaths among humans.\(^{40}\) This shows that the consequences of some environmental harms have pernicious effects with no regard to the location of the perpetrator.

From this the question arises, how to distinguish between national and international environmental acts, causing environmental harm. Can a crime under national law regarding the environment with potential foreign impacts also be deemed as an international crime? As shown above, many harmful acts from environmental perspective have an international link, even if the primary impact lies on the soil of a specific state. The boundlessness of environmental harmful behaviour makes them automatically an international concern, which has to be discussed across state borders.

1.2.3 Impacts of international environmental harm

The world today is facing a plethora of environmental problems.\(^{41}\) Essentially everything done by humans is an intrusion into the natural environment. The impacts of this behaviour need to be dealt with on a daily basis.

The spectrum of effects resulting from international environmental harm ranges from obvious harm to nature, long-term sustainability, human health,

\(^{37}\) Roberto Bargagli *Antarctic ecosystems: Environmental contamination, climate change and human impact* (Springer Verlag, Heidelberg, 2005) at 231.

\(^{38}\) Rosencranz and Johar, above n 11, at 76.


\(^{40}\) Tan, above n 38; Sim, above n 38; N-tv “Killersmog toetet 100.000 Menschen in Suedostasien” (19 September 2016) N-tv <www.n-tv.de>.

\(^{41}\) Lynch and Stretesky, above n 10, at 5.
society, politics, economic losses and threats to international security. Those impacts are intertwined and intensify reciprocally.\textsuperscript{42} Again it is the widespread and incalculable nature of international environmental harms which comes into effect. Drug trafficking is publically one of the best known forms of crime and it receives a lot of media attention, but it may actually not be as dangerous as illegal trade in ODS.\textsuperscript{43} Drugs mainly have negative effects on the direct consumer, whereas the emission of ODS causes threats to the world’s population as a whole.\textsuperscript{44} These global consequences are applicable to nearly all environmental harms. Of course, it is not international environmental crimes alone causing all these problems, but they are a big contributor. It becomes clear that only a small group of people gain from international environmental harm, while almost all global citizens suffer from the changes initiated by green crimes.

For the purpose of an overview it seems wise to look on the overall effects on the environment itself, humans, the economy and other important areas.

\textbf{1.2.3.1 Environmental consequences}

The most obvious impacts of international environmental crimes are the effects on the environment itself. Nearly all of these acts lead to the degradation of nature in general and a significant loss of biodiversity.\textsuperscript{45} Between 1970 and 2012, 58 per cent of species populations vanished from Earth and by 2020 this percentage could climb up to 67 per cent.\textsuperscript{46} While illegal poaching and wildlife trade impacts specific animals, crimes concerning pollution harm all species in the polluted ecosystem.

It is often the case that direct harm is indeterminable shortly after the illegal act, but most effects are staggered. It is frightening that many of the

\begin{footnotesize}
\textsuperscript{43} Rosencranz and Johar, above n 11, at 76.
\textsuperscript{44} At 76.
\textsuperscript{45} Steiner, above n 44, at 10; Banks and others, above n 9, at 10; Andrade, above n 29, at 160.
\end{footnotesize}
environmental changes caused by those crimes are irreversible, which multiplies the actual effect in a long-term point of view.47

Increased human pressure threatens the natural resources, which humanity depends upon, expanding the risk of water shortages, food insecurity, and competition over other natural resources.48 For example, illegal fishing leads to overfishing which then threatens the pursuit of long-term sustainability of one of the most important human food sources.

Advancements in science reveal more and more injurious effects of humans on the environment. Examples for this would be the discovery of the coherence of chlorofluorocarbons (CFCs) and the depletion of the ozone layer or the evidence of climate change. Many people reduce environmental challenges to climate change alone. Climate change is not the problem itself, but part of a global “Earth change”, fuelled from different sources.49 Nevertheless, climate change is a far reaching symptom of humans dealing with an infected global environment.50 International environmental crimes contribute significantly to this symptom’s thriving.

Nevertheless, the long-term environmental consequences of international environmental crimes have not yet been investigated properly and remain highly uncertain.

1.2.3.2 Effects on humans

Harm to the environment brings serious side effects for humans.51 International environmental crimes cause an exceptional degree of harm, which causes more damage than all street crimes by far.52 They are responsible for more deaths than any other form of violence.53 The possibility of potential victims clearly

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47 Mehta and Merz, above n 41, at 3-4.
48 WWF, above n 45, at 21.
50 Polly Higgins Earth is our business: Changing the rules of the game (Shepheard-Walwyn, London, 2012) at XIII.
51 Andrade, above n 29, at 160.
52 Whereby “street crime” refers to any criminal offense in a public place; Lynch and Stretesky, above n 10, at 2.
53 Polly Higgins, above n 8, at 63.
exceeds the victimisation of classic criminal acts.\textsuperscript{54} To speak in numbers, each year in the USA, there are on average 25 million victims of street crime, but in comparison 90 million are people exposed to polluted air.\textsuperscript{55} It is hard to determine individuals as victims in this regard. In fact, those crimes affect the global society as a whole.\textsuperscript{56}

Pollution of air, land and waterways in general causes problems in human health. The aforementioned example regarding the smog released by forest fires in Indonesia threatening the population of parts of South-East Asia reveals the dangerous effects of international environmental crimes on an international scale. This air pollution ultimately results in human deaths.\textsuperscript{57} The population not only faces health issues, but also social changes. Pollution and destruction of land forces people to migrate, overfishing forces many local fishers into poverty or into illegal fishing, whereas forest crimes hinder the livelihood of indigenous populations.

Future generations will suffer the most from the devastating actions of today, without actually having contributed to this environmental problem.\textsuperscript{58} At the moment it appears that current generations are causing harm to the Earth’s environment without being held responsible or receiving any punishment for their actions. An indicator for this is the steadily encroaching “Earth Overshoot Day”. This day marks the date when the world’s population has exhausted as many natural resources as Earth can reproduce in a single year.\textsuperscript{59}

\textbf{1.2.3.3 \hspace{1em} Impacts on the economy}

International environmental degradation also impacts on economic matters. First, illegal activities surrounding environmental issues cause lost development benefits and lost tax revenues mainly in developing countries.\textsuperscript{60} Those funds could be used for infrastructure, education, health care and economic

\begin{thebibliography}{99}
\bibitem{notes} Yingyi Situ and David Emmons \textit{Environmental crime: The criminal justice system’s role in protecting the environment} (SAGE Publications, Thousand Oaks, USA, 2000) at 5; Lynch and Stretesky, above n 19, at 5.
\bibitem{notes} Lynch and Stretesky, above n 10, at 3.
\bibitem{notes} Hayman and Brack, above n 9, at 20.
\bibitem{notes} N-tv, above n 39.
\bibitem{notes} Mehta and Merz, above n 41, at 6.
\bibitem{notes} David M Braun “Earth Overshoot Day arrives earlier than ever” (8 August 2016) National Geographic <\texttt{www.nationalgeographic.com}>
\bibitem{notes} Hunter, Salzman and Zaelke, above n 33, at 1167.
\end{thebibliography}
Illegal operators gain financial profit and thereby create competitive advantage in regard to legal businesses, which paves the way for unfair conditions and presses legal trade out of the market. It might be a spin on the big wheel, but international environmental crimes also lead to job losses in developing countries. Overharvested marine ecosystems cannot provide enough revenue for the many fishers in the business, which then leads to the fact that those people do not have a choice but to turn to illegal fishing, which consequently further increases overfishing.

Second, the impact on the tourism industry should not be underestimated. Many countries profit from tourists, who choose destinations to see specific wildlife or natural beauty. Iconic species are the main capital for some countries, like elephants in Kenya. Without this capital from tourism many countries face serious drops in their gross domestic product.

1.2.3.4 Political repercussions

International green harm can also have consequences on a political level. The problem of international environmental crimes has a deep impact on human security and sustainable development. The ongoing pursuit for a sustainable environment, which is the cornerstone of sustainable development, is heavily undermined by international environmental crimes.

Developing nations bear the lion’s share of the consequences of international environmental harm. The most vulnerable countries are hit the hardest. They do not have the technology and financial power to fight the consequences effectively, which results in a vicious cycle. These consequences are hindering countries like Mozambique from pursuing their goal of becoming

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61 Nellemann and others, above n 3, at 15.
62 At 15.
65 Banks and others, above n 9, at 5.
66 Nellemann and others, above n 3, at 15.
68 Nellemann and others, above n 3, at 41.
more developed nations. In fact, international environmental crimes contribute to the stagnation of developing countries.\textsuperscript{69}

As mentioned before, the link between rebel or terror groups and international environmental crimes is seen as a major threat.\textsuperscript{70} These groups have discovered how to use natural resources as a helpful source of income.\textsuperscript{71} This impact is not directly of an environmental nature, but is seen as danger to state stability and international security.\textsuperscript{72}

The relationship between a habitable environment and human security is fundamental for international security.\textsuperscript{73} An uninhabitable environment can produce refugees and lead to migration.\textsuperscript{74} The fact that migration can cause huge political, societal and security problems can be currently observed throughout Europe.\textsuperscript{75}

1.2.4 Drivers of international environmental crimes

In the last few years the “market” around international environmental crimes is skyrocketing and it seems very likely that it will further grow in the coming decades.\textsuperscript{76} The growth of international environmental crimes is fuelled by a number of different reasons. Regulatory failures, lack of enforcement, corruption, few resources for investigation, lack of expertise, cost differences between the countries and no regards for environmental protection, to just name a few.\textsuperscript{77}

1.2.4.1 Low-risk high-profit structure

In the first place it is the low-risk high-profit structure of international environmental crimes which attracts criminals.\textsuperscript{78} The attractiveness lies in the fact that the crimes in question offer large profits for a small amount of risk.\textsuperscript{79}

\textsuperscript{69} Environmental Investigation Agency \textit{Appetite for destruction - China's trade in illegal timber}, above n 17, at 18.

\textsuperscript{70} Nellemann and others, above n 3, at 7.

\textsuperscript{71} At 16.

\textsuperscript{72} At 15, 16.

\textsuperscript{73} Freeland, above n 14, at. 113.

\textsuperscript{74} Banks and others, above n 9, at 5.

\textsuperscript{75} James Hampshire “Europe’s migration crisis” (2015) 6(3) Political Insight 8 at 8.

\textsuperscript{76} Hayman and Brack, above n 9, at 5; Nellemann and others, above n 3, at 4.

\textsuperscript{77} Brack “The growth and control of international environmental crime”, above n 9, at 80.

\textsuperscript{78} At 80; Andrade, above n 29, at 161.
Low risk encompasses weak legislation, poor enforcement power and easily identified loopholes in current regulations.\textsuperscript{80} Sometimes fines for environmental misbehaviour are already factored in.\textsuperscript{81} Simple misdeclaration of products can transform an illegal product into allegedly legal goods. This technique is, for example, frequently used in trading ODS.\textsuperscript{82} High profit is achieved due to high prices on the world market for certain goods. Rhinoceros horn, for example, was 2014 priced at approximately USD 65,000 per kilogram, making it more valuable than gold.\textsuperscript{83} The EIA sees international environmental crime as “one of the most profitable forms of criminal activity”.\textsuperscript{84} Paradoxically the decline of certain species increases their market value, which makes them even more of a target for illegal poaching and trade.\textsuperscript{85} Successful anti-poaching campaigns contribute to rising prices as well.\textsuperscript{86} A similar concerning development can be observed in the illegal trade in ODS. As restrictions on usage and production are rising the supply is dropping and prices are increasing, making this field more attractive to criminals.\textsuperscript{87}

1.2.4.2 Economic greed
The modern economy needs steady growth whatever the costs to the environment or ultimately to humans. While developed nations improve environmental protection, they are still contributing massively to environmental degradation under the cloak of big corporations letting them exploit the natural resources of developing countries, whereby governments of underdeveloped countries are willing partners with eyes only for quick economic gains.\textsuperscript{88}

The worldwide financial greed of individuals, groups, companies and governments with little regard for natural sustainability enhances international environmental crimes. Higgins speaks of a new era of colonisation, this time not

\textsuperscript{79} Banks and others, above n 9, at 1; Himbert, above n 6, at 20; Nelleman and others, above n 3, at 9.
\textsuperscript{80} Nelleman and others, above n 3, at 75, 76.
\textsuperscript{81} Higgins, above n 8, at 69.
\textsuperscript{82} Rosencranz and Johar, above n 11, at 76.
\textsuperscript{83} Steiner, above n 44, at 10.
\textsuperscript{84} Banks and others, above n 9, at 2.
\textsuperscript{85} Hunter, Salzman and Zaelke, above n 33, at 1069.
\textsuperscript{86} Nelleman and others, above n 3, at 75.
\textsuperscript{87} Hunter, Salzman and Zaelke, above n 33, at 1069.
\textsuperscript{88} Berat, above n 2, at 328.
conducted by states, but by multinational companies.89 The conduct of the crimes often occurs in developing countries, but is operated by international groups and driven by the high demand in developed countries.90 Searching for natural resources in countries with low environmental standards and weak enforcement also increases waste crimes, as the saying “an open door may tempt a saint” suggests.91 At the moment there is no balance keeping a solid economy and a healthy environment. Currently the only equaliser is the moral duty society has to future generations.92

Numbers from a report by the United Nations Environment Programme (UNEP) and the International Criminal Police Organisation (INTERPOL) reveal estimated revenues in international environmental crimes of approximately USD 91-258 billion in 2016.93 In comparison to the numbers from their 2014 report this means an increase of 26 per cent, making international environmental crime the fourth largest crime in terms of value in the world.94 This underlines the market power international environmental crimes possess. Interestingly those numbers only partly include the money which is involved in this area. It neither contains the value of the military operations linked to environmental damage, nor profits gained from corporate crimes generating ecological harm. Most importantly it does not include the monetary value of the fatal short-term and long-term consequences for the planet.

1.2.4.3 Lack of concern for the environment

A general lack of concern for the natural environment coupled with human arrogance and a feeling of superiority contributes to the lax attitude regarding international environmental crimes.95 The environment is seen as an always given indestructible “thing” and as subject of the humans.96 This results in a general lack of legislation and enforcement, which again is a reason for under-

89 Higgins, above n 8, at 66.
90 Banks and others, above n 9, at 6.
91 Lynch and Stretesky, above n 10, at 4.
92 Berat, above n 2, at 340.
93 Nellemann and others, above n 3, at 7.
94 At 7.
95 Brack “The growth and control of international environmental crime”, above n 9, at 80.
96 Charlotte Davies “Environmental criminals’ perceptions on crime, corruption and CITES” in Angus Nurse (ed) Critical Perspective on Green Criminology (Internet Journal of Criminology, 2014) at 44.
resourced counter projects and poor budgets for prosecution and jurisdiction of potential international environmental crimes.\textsuperscript{97} Lack of concern correlates to low education standards regarding environmental protection amongst the world’s population, especially in developing countries. Without paying attention to this, most industrial regions exceed their ecological footprint with what is locally available.\textsuperscript{98} This leads to the exploitation of developing countries and brings along transnational environmental crimes and a general decline in global environmental health.\textsuperscript{99}

1.2.4.4 Corruption

Another serious problem, which is not only seen in environmental matters and undermines the ambition of good governance, is corruption.\textsuperscript{100} Occurring, for example, through forging import and export certificates or simply “turning a blind eye”, but also long-term involvement of governmental officials is common.\textsuperscript{101} This is not only a problem in the least developed countries, but occurs in Western democracies, whereby the involvement of the Mafia and Italian governmental officials in waste crimes serves as good example.\textsuperscript{102} “Bad governance” in general plays a key role in difficulties achieving sustainable development and thus protection from international environmental crime.

1.2.4.5 Poverty

In some cases it is simply poverty which is forcing people into the sphere of environmental harm.\textsuperscript{103} These people mostly have no choice but to harm the environment to provide for their families. In Africa poaching offers far higher revenue than other sources.\textsuperscript{104} This societal problem is aggravated by population growth and density of human habitation.\textsuperscript{105}

\textsuperscript{97} Nellemann and others, above n 3, at 76.
\textsuperscript{98} Mathis Wackernagel and others “National natural capital accounting with the ecological footprint concept” (1999) 29 Ecological Economics 375 at 377.
\textsuperscript{99} Lynch and Stretesky, above n 10, at 4.
\textsuperscript{100} Brack “The growth and control of international environmental crime”, above n 9, at 80.
\textsuperscript{101} Banks and others, above n 9, at 3.
\textsuperscript{102} Ludgarde Coppens “Transnational environmental crime – A common crime in need of better enforcement” (2013) 6 Environmental Development 108 at 111.
\textsuperscript{103} Nellemann and others, above n 3, at 75.
\textsuperscript{104} At 75.
\textsuperscript{105} Lynch and Stretesky, above n 10, at 3, 4.
1.2.5 Entanglement with other areas of international crime

1.2.5.1 The cross-cutting nature of international environmental crimes

The cross-cutting nature of international environmental crimes is evident. International environmental crimes mostly do not occur exclusively, but are linked to other areas of criminal activity. In recent years environmental crimes have become part of the global network of organised crime and occur hand in hand with other areas of crime. The crimes in question can be traced to multinational organised syndicates, worldwide operating businesses, terror groups and even governments. The interweaving of international environmental crimes in other areas of serious international crime, and the scale of those activities makes them even more dangerous and raises concerns among experts. These activities are linked to crimes, such as illegal acquisition of logging rights, tax fraud, illegal transportation, forged documents, misdeclaration at customs, bribery, corruption, money laundering, transfer mispricing, double counting, violence, intimidation and murder. Human rights abuses are also an equally, if not more horrific, side effect.

International environmental crimes overlap with nearly all other serious forms of crime, without having its own stable standing in the scheme of recognised international crimes. Without the continuance of environmental protection international environmental crimes will be further implemented in the broad scheme of lawlessness.

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106 Andrade, above n 29, at 160.
107 Brack “The growth and control of international environmental crime”, above n 9, at 80.
108 Banks and others, above n 9, at 1; Nellemann and others, above n 3, at 7, 67; Environmental Investigation Agency Appetite for destruction - China’s trade in illegal timber, above n 17, at 8.
109 Andrade, above n 29, at 160.
110 Banks and others, above n 9, at 6; Nellemann and others, above n 3, at 9.
111 Banks and others, above n 9, at 6.
1.2.5.2 Murder, terror and human rights violations

In general a high rate of violence occurs in the context of international environmental crimes.\(^{112}\) Frequently, it is foreign journalists, local activists or indigenous inhabitants who are targets of those related crimes.\(^{113}\) Illegal logging has lead to serious armed conflicts in several countries, for example in Sierra Leone and Myanmar.\(^{114}\) Fisheries crimes often occur together with forced child labour, slavery at sea or trafficking in drugs and weapons.\(^{115}\) Crimes in carbon trade are closely linked to the financial sector, which makes the carbon trading regime as well as financial markets, insecure.\(^{116}\) Altogether the proportion of white collar crime related to international environmental crimes is undeniably high. White collar crimes in the environmental sector are comparable to classic white collar crimes and include the use of shell companies in tax havens, tax fraud, money laundering and securities fraud.\(^{117}\) Waste crime is sometimes even classified as white collar crime.\(^{118}\)

Most alarmingly, terror groups are profiting from international environmental crimes to fund their cause; In Africa, Boko Haram is involved in illegal wildlife trafficking;\(^{119}\) in the Middle East the Islamic State profits from illegal extraction and trade in oil and in South America organised criminal groups benefit from illegal gold mining.\(^{120}\)

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\(^{112}\) Environmental Investigation Agency *Appetite for destruction - China's trade in illegal timber*, above n 17, at 2.


\(^{114}\) Environmental Investigation Agency *Appetite for destruction - China's trade in illegal timber*, above n 17, at 2.


\(^{116}\) INTERPOL, above n 23, at 11.

\(^{117}\) Nellemann and others, above n 3, at 65.

\(^{118}\) Jim Baird, Robin Curry and Pedro Cruz "An overview of waste crime, its characteristics, and the vulnerability of the EU waste sector" (2014) 32(2) Waste Management and Research 97 at 100.

\(^{119}\) Medina and Bergenas, above n 114.

Another important link with international environmental crimes is with human rights.\textsuperscript{121} To enjoy a full range of human rights, the surrounding environment is of high importance. Without access to a safe and healthy environment, human rights cannot exist globally on even the basic level set out in article 1 of the Universal Declaration of Human Rights.\textsuperscript{122}

It is not only the connections to other areas of crime, but also the link between international environmental crimes themselves, that characterises the complexity of those crimes. Waste crime, for example, covers on the one hand illegal trade in hazardous substances and, on the other hand, triggers pollution wherever the waste is brought.

\section*{1.3 Areas of international environmental crimes}

Through the years five environmental "crimes" have risen to recognition as of major concern, through the support of the INTERPOL, European Union (EU) and UNEP.\textsuperscript{123} These primary crimes consist of illegal logging, illegal fishing and illegal trade in wildlife, ODS and waste.\textsuperscript{124}

These five areas of international environmental crime are commonly used to describe the area in general. However, this does not represent the true extent of environmental crimes. Other criminal offences related to the environment include the illegal sale of gold, diamonds, charcoal, oil or genetically modified products; environmental crimes during warfare; wilful pollution of waterways; illegal land grabs; biopiracy; and several white collar crimes.\textsuperscript{125} This is a diverse collection of crimes with one common feature: the capability to harm the natural environment.

The following introduces selected areas of international environmental crimes.

\begin{itemize}
\item \textsuperscript{121} Freeland, above n 14, at 113; Mehta and Merz, above n 41, at 5.
\item \textsuperscript{122} United Nations Universal Declaration of Human Rights (1948), art 1; Freeland, above n 14, at 131.
\item \textsuperscript{123} Brack “The growth and control of international environmental crime”, above n 9, at 80; Banks and others, above n 9, at 1.
\item \textsuperscript{124} Brack “The growth and control of international environmental crime”, above n 9, at 80; Banks and others, above n 9, at 1; OECD, above n 2, at 14.
\item \textsuperscript{125} Steven Freeland \textit{Addressing the International Destruction of the Environment during Warfare under the Rome Statute of the International Criminal Court} (Intersentia, Cambridge, 2015) at 5; Nellemann and others, above n 3, at 17, 64; Hayman and Brack, above n 9, at 4.
\end{itemize}
1.3.1 Wildlife crimes

1.3.1.1 Illegal trade in wildlife

Illegal trade in wildlife is defined as “any environment-related act that involves the illegal trade, smuggling, poaching, capture or collection of endangered species, protected wildlife, derivatives or products thereof”.\footnote{Nigel South and Tanya Wyatt “Comparing illicit trades in wildlife and drugs: an exploratory study” (2011) 32(6) Deviant Behavior 538 at 546; Brack “The growth and control of international environmental crime”, above n 9, at 80.} The related criminal actions serve the black market with ivory as decoration, rhinoceros horn for alternative medical purposes or tiger bones for superstitious reasons.\footnote{Sharon Guynup “Tigers in traditional Chinese medicine: A universal apothecary” (29 April 2014) National Geographic <www.nationalgeographic.com>; Nellemann and others, above n 3, at 75.} This market is a multi-billion dollar industry with an estimated revenue of 7-23 billion USD per year, making it one of the most profitable areas of illegal international trade.\footnote{Hunter, Salzman and Zaelke, above n 33, at 1068; Nellemann and others, above n 3, at 41.} The uncertainty as to the estimated revenue shows that there is not enough investigation involved.

Motivated by profit, a wide catalogue of animals and plants are illegally trafficked with species ranging from elephants to insects and specific plants.\footnote{Ed Cumming “Plant Theft: the World’s Most Popular Black Market Plants” (24 January 2014) The Telegraph <www.telegraph.co.uk>; Nellemann and others, above n 3, at 41, 45.} Nearly all of those animals are listed on the ‘Red List of Threatened Species’ by the International Union for the Conservation of Nature (IUCN). Their classification ranges from vulnerable (African Elephant) to critically endangered (Orang-Utan).\footnote{Marc Ancrenaz and others “Pongo pygmaeus: The IUCN Red List of Threatened Species” (IUCN, Gland, Switzerland, 2016); Julian Blanc “Loxodonta africana: The IUCN Red List of Threatened Species” (IUCN, Gland, Switzerland, 2008).} Most of the animals in question are listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), strictly regulating transnational commercial trade under article 2(1) and article 3 CITES.\footnote{Convention on International Trade in Endangered Species of Wild Fauna and Flora 993 UNTS 243 (open for signature 3 March 1973, entered into force 1 July 1975), art 2, 3.} Some of the most commonly traded animals are sitting on the edge of extinction, because of their commercial exploitation.\footnote{Hunter, Salzman and Zaelke, above n 33, at 1068; Pierre-Arnaud Chouvy Atlas of Trafficking in Southeast Asia (I.B. Tauris, London, 2013) at 138.} Apart from the iconic endangered species elephants and tigers, a significant
number of unknown animals suffer from illegal hunt and trade. These species fail to garner attention. One such creature is the Malayan Pangolin, a scaly anteater that is largely unknown, yet still the most illegally hunted and trafficked animal worldwide in recent times. This is mainly driven by a high rate of poaching for its scales and meat, reflecting the demand in China and other local Asian markets.

Africa, the Americas and Asia make up common supply regions for wildlife trade, while Europe, North America, the Middle East and Asian countries including China, Japan and Korea are identified as areas of demand. The trade flow leads from less developed countries to more developed regions. This illegal trade is usually organised by international criminal networks with help from corrupt officials, multinational businesses and governments of certain states acting similar to a global cooperative. This represents a problem on a global scale.

Trade in pangolin parts can be a good indicator of the rapid growth of illegal wildlife trade. Prior to 2013, seizures of illicit trade involving pangolin parts did not exceed half a ton. By 2015, seizures increased to almost eight tons. The 17th CITES Conference in 2016 upgraded several pangolin species from Appendix II to Appendix I of the CITES agreement. The rate of poaching is not the only concern, with an increase in quality of equipment used by poachers. Modern day rhinoceros poachers use heavy weapons and helicopters to hunt. While this is not common with poachers of other animals, it displays frightening investments and organisation.

The consequences of illegal trade in wildlife provide a daunting picture. This includes long-term concerns for species conservation and the preservation

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133 Medina and Bergenas, above n 114; Hayman and Brack, above n 9, at 7.
135 Daniel Challender "Manis javanica: The IUCN Red List of Threatened Species" (IUCN, Gland, Switzerland, 2014).
136 Tanya Wyatt Green Criminology & Wildlife Trafficking: The Illegal Fur and Falcon Trades in Russia Far East (Lambert Academic Publishing, 2012) at 13; Chouvy, above n 131, at 137
137 Hayman and Brack, above n 9, at 6..
138 Nellemann and others, above n 3, at 41.
139 At 45.
140 At 49.
of a healthy biodiversity. Another worrying factor is the potential spread of zoonotic diseases due to the global unregulated and unprotected trade of wildlife products. Furthermore there is evidence that revenue made from illegal wildlife trafficking is used to fund other forms of organised crime and even terrorism. Countermeasures are mainly left to the states themselves governed by their own law and rules set out by international agreements such as the CITES agreement that deal with wildlife crime. Recent developments show greater international involvement to prevent the spread of wildlife crime. Despite the efforts, wildlife crime remains a growing area of criminal concern.

1.3.1.2 Whaling

While fisheries are of high importance for alleviating the hunger of the world's citizens and maintaining subsistence of approximately twelve per cent of the global population, fisheries are among the most exploited resources on the planet. The significance of the fisheries sector makes it prone to criminal behaviour, as shown by a significant increase in wild resource exploitation over the past decade. Illegal, unregulated and unreported fishing and whaling pose a threat to the health of marine ecosystems and arguably do not receive enough condemnation from the international community. In this regard whaling receives a lot of media attention and is often used as forerunner to describe environmental crimes in general.

The killing of the biggest mammals on Earth causes concern. As close to all whale species were pushed to the edge of extinction, the International Convention for the Regulation of Whaling (ICRW) and the International Whaling Commission (IWC) came to fruition in 1946. During the years the IWC switched its focus from purely “harvesting” management to a more conservational

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144 Food and Agriculture Organization of the United Nations The state of the world fishing and aquaculture (FAO, Rome, 2014) 6.
145 Andrade, above n 29, at 162.
approach, which lead to a global moratorium on commercial whaling in 1986.\footnote{Klaus Bosselmann \textit{Earth Governance: Trusteeship of the Global Commons} (Elgar, Auckland, 2015) at 90-91.} Nevertheless, some nations still hunt whales in deliberate contravention of the IWC moratorium or under the cloak of scientific research, including Iceland, Norway and Japan. The \textit{Whaling in the Antarctic} Decision of the International Court of Justice (ICJ) in 2014 strengthened the protection and further outlawed the hunt of the big mammals.\footnote{\textit{Whaling in the Antarctic} (Australia v Japan: New Zealand intervening) (Merits) (2014) ICJ Rep 2014.}

Even with this step by step moratorium of whaling there is still no international entity handling criminal sanctions against those hunting for whales. Especially the fact that Japan quickly issued a new whaling programme, after the ICJ ruled that the former programme was in contravention of international law, the question for stricter rules and criminal punishment becomes more apparent.

\subsection*{1.3.2 Illegal trade in ozone depleting substances}

The stratospheric ozone layer shielding the Earth from ultraviolet radiation is vital for the Earth’s environment and human health.\footnote{Hunter, Salzman and Zaelke, above n 33, at 535.} All life on Earth is dependent on this chemical shield.\footnote{Banks and others, above n 9, at 14.} Exposure to increased ultraviolet radiation through a decreasing ozone layer affects marine and terrestrial organisms and causes an increased likelihood of skin cancer for humans.\footnote{Environmental Investigation Agency \textit{Lost in Transit: Global CFC smuggling trends and the need for a faster phase-out}, above n 21, at 3.} The aim of the 1987 Montreal Protocol is to lead to a world without consumption or production of ODS by 2030, stabilising this layer.\footnote{Hunter, Salzman and Zaelke, above n 33, at 533.} The Montreal Protocol is considered the most successful international environmental agreement ever conducted.

However, the Protocol is not a total cure, with the existence of ongoing ODS trade undermining the landmark agreement.\footnote{At 532, 567.} The agreement failed to account for the possibility of an illegal industry.\footnote{Banks and others, above n 9, at 15.} After restrictions came into effect and the phase-out of ODS began, the smuggling of CFCs, the main contributor to
The time-gap in the phase out process between developed and developing countries provided an opportunity for illegal trade. Ending the production and consumption of ODS has enticed criminal activities around ODS. A loophole in the Montreal Protocol allowing trade in recycled ODS provides another gateway for these criminal activities. The trade in ODS remains lively in developing countries due to the low price compared to their substitutes and the lack of regulation and enforcement. Restrictions set out in the Montreal Protocol are avoided through false labelling, counterfeit paperwork, misdeclaration, smuggling illegal materials inside a layer of legal products and sham export corporations. This issue requires attention from a broad collection of stakeholders beyond an environmental perspective extending to customs and tax organisations.

A licensing mechanism to prevent illegal trade in ODS signed by parties to the Montreal Protocol in 1997 had a limited effect on the illegal black market. Dealers of the illegal chemicals widely ignore the global consequences of ozone depletion for quick profit. The importance of the ozone layer and proven corrosive impacts of ODS emission fails to alter the behaviour of those involved in the ongoing trade.

1.3.3 Transboundary pollution

In the modern industrial age numerous examples arise of anthropogenic pollution harming the environment; the 1984 Bhopal incident in India, the Exxon Valdez oil spill in the unique Prince William Sound in Alaska in 1989, or the Bento Rodriguez dam collapse in Brazil in 2015. This list of catastrophes could be vastly extended with events polluting the environment.

Pollution is not merely prevalent with certain disasters. Industrialisation

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154 At 15; Hunter, Salzman and Zaelke, above n 33, at 1567.
155 Rosencranz and Johar, above n 11, at 76.
156 At 73.
157 Banks and others, above n 9, at 15.
158 Rosencranz and Johar, above n 11, at 73.
159 At 76; Banks and others, above n 9, at 16-17.
160 Banks and others, above n 9, at 16.
has led to the emission of significant amounts of pollutants into our ecosystems. This detrimental industrial output is seen by many as normal or traditional emission.\(^{162}\) All forms of pollutants resulting from human conduct can be found in various ecosystems all over the planet. On a daily basis, humans are contributing to further defilement of the oceans through litter. Plastic litter harms ocean species and plastic particles are reaching deep into the food chain affecting human health. Understanding the lack of practicality in criminalising every polluting activity, it would be helpful to make progress in some regard. The carbon trade which aimed to control one of the main polluting industries failed and shifted itself into a shadow business with high criminal involvement.

Crimes relating to pollution are usually intertwined with other environmental crimes. Waste crime or trade in ODS may be argued to be pollution crimes despite consideration as independent forms of environmental crime. Further complicating the issue, the high percentage of involvement by corporations mixes pollution crimes with white collar crimes. The Exxon Valdez and other disasters mentioned above occur through negligence of companies and a focus on profit over impact on the environment. Direct crimes in the pollution sector have a direct impact on humans due to the dangerous substances in question, such as carbon monoxide.\(^{163}\) Pollution damages livelihoods, lowers the value of property, contributes substantially to climate change, threatens jobs and can cost human life, as seen in the Bhopal disaster. The problems arising from pollution disasters are mostly handled under national law even if the event occurs across borders.\(^{164}\)

Crimes associated with waste are usually directly intertwined with pollution and are considered a pollution based crime, committed by illegal trading and disposal of toxic waste or through any wider contravention of laws concerning the handling of waste.\(^{165}\) Whereby “waste crime” is considered a substantial subset of overall environmental crimes.\(^{166}\) The term “waste crime” composes several crimes associated with the handling of garbage. The scope of

\(^{162}\) Hunter, Salzman and Zaelke, above n 33, at 533.
\(^{163}\) Andrade, above n 29, at 162, 163.
\(^{164}\) Hunter, Salzman and Zaelke, above n 33, at 533.
\(^{165}\) Baird, Curry and Cruz, above n 117, at 98.
“waste” ranges from normal daily rubbish, hazardous waste and toxic chemicals to old electronic devices (e-Waste).\textsuperscript{167} UNEP and INTERPOL value the profits of waste crime to be between ten and twelve billion USD.\textsuperscript{168} The size of this industry, its complexity and the nature of waste offers many options for criminals to abuse the market and operate a lucrative business.\textsuperscript{169} Despite the implementation of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention) in 1992 as a major international regulatory agreement controlling the transboundary movement of hazardous and other waste, the illegal market is still flourishing. Expensive treatment or disposal of waste in general, insufficient regulation, weak enforcement measures and little attention fuel the illegal market.\textsuperscript{170} Mafia-like organisations are established in the illegal waste crime business and dominate the black market.\textsuperscript{171} These groups use their illicit networks for drugs, arms or other contraband already in place to expand their illegal business. This exploits high costs for the disposal of hazardous waste or chemicals and generates a fortune by avoiding environmental regulations for sustainable waste disposal. Most western countries have introduced the high standards associated with high costs for legal waste disposal. Developing countries tend to have lenient regulation with limited ability to enforce such regulations. Unsurprisingly this leads to a “North-South” trade. Garbage is shipped from the “rich” north into the “poor” south.\textsuperscript{172} This establishes a circulation. Resources are shipped to developed countries with waste returning to the country of origin resulting in a flourishing “North-South” waste trade, without any regards to the environment in the receiving states.\textsuperscript{173}

Waste crime is an ideal example of an international environmental crime entangled with other environmental crimes and other areas of international crime. Illegal dumping of waste, in particular old fishing equipment is a major

\textsuperscript{167} Nellemann and others, above n 3, at 62.
\textsuperscript{168} At 7.
\textsuperscript{169} Baird, Curry and Cruz, above n 117, at 97.
\textsuperscript{170} Ieva Rucevska and others Waste crime - Waste risks: Gaps in meeting the global waste challenge (UNEP, Nairobi, 2015) at 6.
\textsuperscript{171} At 8, 9.
\textsuperscript{172} Nellemann and others, above n 3, at 62-63.
contributor to the overall littering of the oceans and is linked to fisheries

174 Acts like this affect both the marine environment and the ecosystem

ashore. Dumping sites or “fly tipping” strains the terrestrial environment.

Disposal of nuclear waste presents another pressing issue. The lack of an

equally inexpensive and ecologically compatible way of disposal has led to the

emergence of illegal business. The Italian Mafia organisation “Ndrangheta” is

thought to have dumped more than 30 ships with toxic and radioactive waste on

board to gain financial profit.175

1.4 Conclusion

As this thesis is directed at the governance of international environmental

crimes, this chapter has sought to introduce the crimes in question and outline

the need to criminalise environmental harm. After this inauguration of the

topic's complexity it can be said that the mentioned acts form a very complex
global system primarily harming and even eradicating natural ecosystems,

which poses a hybrid challenge. Numerous and widespread root causes, many

disastrous consequences, the close connection to policy, security and other

forms of crimes and the fact that international environmental crimes are of a

global concern evoke a new challenge for the international community. Given

the broad and intertwined nature of international environmental crimes,

international law has a specific role to play. Those crimes are contributing to

further depletion of many third-world countries and fuelling a vicious cycle of

poverty, crime and regression. The crimes in question are aggravated through

the uncertainty concerning their long-term impacts and the flow-on additional

costs for future generations. The irreversible impacts underline the need for

immediate action to condemn these threats. A comprehensive approach is what

is needed.

Article 1(1) of the Charter of the United Nations (UN-Charter) sets out

universal peace as the main goal of the United Nations Organisation (UN).176 Due

174 Environmental Investigation Agency Lost at sea: The urgent need to tackle marine litter, above

n 34, at 3.

175 Nick Squires “Mafia accused of sinking ship full of radioactive waste off Italy” (16 September


176 Charter of the United Nations, art 1(1).
to the rapid expansion of environmental crimes throughout the globe, they ought to be understood as a global problem and addressed as an international threat to universal peace. Their complexity and unpredictability provide compelling arguments that international environmental crimes are one of the most serious areas of international crimes. The overarching nature of the environment creates a unique but complicated context to generate solutions in international law. In order to protect the environment and ensure sustainable development, it is crucial to prioritise international environmental security and international environmental crimes. It is therefore of utmost importance to understand that the global environment is the key and basis to human existence and all life, particularly for future generations to be able to thrive. Further growth and proliferation of these crimes - which is predicted to happen - will increase the risk for the global community.

177 Nellemann and others, above n 3, at 4.
178 Andrade, above n 29, at 164.
179 At 164; Higgins, above n 8, at 61.
180 Brack “The growth and control of international environmental crime”, above n 9, at 80; Nellemann and others, above n 3, at 4.
Chapter Two

The Existing Paradigm

*Is enough currently done at the international level to respond to international environmental crimes?*

2.1 Introduction

It is not the case that there are no mechanisms in place to respond to international environmental harm. Over the last decades, growing international environmental burdens have opened the door for the spread of treaties, conventions and regulations to put a check on environmental degradation and push environmental protection. There are currently more than 200 multilateral environmental agreements (MEAs) governing international environmental matters. In addition to this there are more than 900 bilateral international agreements with environmental provisions. These agreements rarely use criminalisation as an enforcement mechanism, but some contain special provisions related to environmental crimes.

Next to this vast number of international agreements there are a couple of institutions on the international level, which take up a place in the fight against spreading international environmental crime. These entities range from well-known intergovernmental organisations to regional state alliances or NGOs.

This chapter aims to demonstrate the current legal structures and repercussions of international environmental crimes.

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182 Soroos, above n 48, at 2.
2.2 What is the current paradigm in regards to international environmental crimes?

International environmental criminal law is the result of the overlap of the international environmental law regime and the international criminal law regime.\textsuperscript{183} The international legal landscape does not yet provide a coherent schedule to tackle criminalisation of international environmental harm. A stringent plan to follow is simply not in existence. This lack of a comprehensive approach is one of the main problems in context of international environmental criminal law.\textsuperscript{184} As a consequence, there is no direct legal structure to combat international environmental crimes. Some treaties are not even directly about environmental issues, but have consequences in environmental matters, such as the nuclear ban.\textsuperscript{185} The often cited CITES agreement only refers to flora and fauna and fails to take other environmental resources into account.\textsuperscript{186} However, there are certain constructions, which indirectly take on the problem of international environmental harm through certain acts.

These approaches are versatile and vary from education to international police work. There is a wide overarching part in developmental and societal goals, which is related to implementation of environmental compliance, enforcement and sustainable development as a whole.\textsuperscript{187} International environmental crime is often an obstruction to the aforementioned aims.\textsuperscript{188}

2.2.1 The relationship between international environmental crimes and classic criminology

Classic criminology clearly does not involve environmental crimes as a component. This has begun to change, as interest in green criminology is rising. International environmental crimes provide a new subchapter for mainstream

\begin{footnotesize}
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\item \textsuperscript{183} Wilfried Erbguth and Sabine Schlacke \textit{Umweltrecht} (3rd ed, Nomos, Baden-Baden, 2010) at 152.
\item \textsuperscript{184} Bergenas and Knight, above n 21, at 125
\item \textsuperscript{185} Freeland, above n 14, at 121.
\item \textsuperscript{186} Bergenas and Knight, above n 21, at 126.
\item \textsuperscript{187} Andrade, above n 29, at 159.
\item \textsuperscript{188} At 159.
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criminology and offer presumably the greatest intricacy of all areas of criminal research.\(^{189}\)

Environmental law itself is a relatively young concept in international law as well as in national law.\(^{190}\) Moreover, international environmental law itself is already a complex self-contained regime within international law, but is unfortunately characterised by soft regulation, soft enforcement and soft compliance.\(^{191}\) However, the last decades have brought some changes in the understanding of the relationship between humans and the environment with the 1972 United Nations Conference on the Human Environment (Stockholm Declaration) leading the way.\(^{192}\) The rise of international environmental law has made the environment worthy of research from a criminological perspective.\(^{193}\)

2.2.2 Stakeholders involved in combating international environmental crimes

Chapter One has unveiled the actors playing a role in committing and support international environmental crime. States, criminal groups, companies and individuals are among the stakeholders involved. This section will take a look from the opposite site: actors trying to combat the crimes in question.

2.2.2.1 States

As international environmental crimes are taking part on the international level, states are the stakeholders at the centre of attention. Some states have established specialised national agencies to deal with pressing environmental matters.\(^{194}\) The powerful Environmental Protection Agency in the USA is a good example, but also smaller scale institutions such as national park agencies or local municipal councils, have to be listed in that regard.\(^{195}\) In comparison, developing countries often do not have the resources to fight environmental crimes within their borders or to prevent them from impacting on other states.

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\(^{189}\) South and Wyatt, above n 125, at 546.

\(^{190}\) Berat, above n 2, at 327.


\(^{192}\) South, above n 11, at 220; Berat, above n 2, at 327.

\(^{193}\) South, above n 11, at 214.


\(^{195}\) At 4.
at the international level. The sites most affected by international environmental harms are mostly located in areas with insufficient funds to address these changes in any way. They are often left alone with their environmental problems by the international community of states.

2.2.2.2 **Intergovernmental organisations**

International intergovernmental organisations played an important role in the development of today’s international environmental law and they will continue to take up a vital part in the future development of the fight against international environmental harm. They offer a forum for discussion, provide public information, help collecting information and intelligence, contribute in sharing of information and initiate cooperation between states in global environmental matters. The decentralised nature of the international environmental law regime enables a vast range of NGOs to play a role in specific areas of international environmental crimes. UNEP, the World Bank, the International Consortium on Combating Wildlife Crime (ICCWC), the Food and Agriculture Organisation, the International Law Commission, International Labour Organisation, the International Atomic Energy Agency, the World Health Organisation, European Commission and INTERPOL are just examples of the wide range of actors in this field. Even organisations focused on international trade are also concerned about the rise of international environmental crimes and take up a role in combating them.

INTERPOL takes up a key position in this area. Through various forms of cooperation with several other international entities and national governments INTERPOL tries to take a comprehensive approach. The Organisation casts a wider net in order to catch environmental perpetrators by targeting all criminal

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196 Nellemann and others, above n 3, at 11.
197 Erbguth and Schlacke, above n 182, at 160.
198 At 160.
200 Mark A Drumbl “Waging war against the world: The need to move from war crimes to environmental crimes” (1998) Fordham International Law Journal 22(1) 122 at 149.
201 Bergenas and Knight, above n 21, at 126.
activities, including environmental ones, but also fraud or money laundering. As the international police agency, INTERPOL assists national governments, collects intelligence, raises awareness of the problem of international environmental crime and also leads its own counter-projects. Next to INTERPOL sits the ICCWC, which is composed of CITES, INTERPOL, the United Nations Office on Drugs and Crime, the World Bank and the World Customs Organisation. These organisations have combined their powers to raise awareness and provide assistance for countries in tackling wildlife crime.

Other players, for example the European Commission, are mainly in financing the effort to combat international environmental harm.

UNEP occupies another key position. Inside UNEP its subsidiary, the Division on Environmental Law and Conventions (DELC), handles international environmental crime and works, for example, towards a better understanding of transnational or cross-border environmental crime. The environmental arm of the UN has adopted soft law instruments on compliance with international environmental crimes. However, these soft laws are providing only basic concepts and are only of advisory quality. As non-binding provisions, they still depend on the voluntary adherence of the national states. Most of the intergovernmental organisations are created by sovereign states and are therefore accountable to them and not “free” in their actions. Nevertheless, even the UNSC has reacted to the threat of international environmental harm, which shows the concern on the highest level.

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202 At 126.
205 Fajardo del Castillo, above n 190, at 8.
206 At 6, 7.
207 At 6, 7.
208 Soroos, above n 48, at 10.
2.2.2.3 Non-governmental organisations

Governments generally appear as regulator, whereby industry and citizens are the ones being regulated. In this two person scheme NGOs are the third party, who monitor compliance and provide other sorts of helpful support for the regulator.\(^{210}\) International collaboration does not stop at a governmental level, but also needs commitment from transnational public interest advocates, social society groups and the private sector.\(^{211}\) NGOs have an outstanding role in the context of international environmental harm and their power in that regard should not be under-estimated.\(^{212}\) NGOs helped, for example, to set up the International Criminal Court (ICC) through constant advocacy and championing for the institution. In fact, NGOs are probably the main driving force for the investigation and advocacy of international environmental harm. Due to the complexity of international environmental harm an answer to global environmental degradation requires a wide range of expertise and a broad surveillance network.\(^{213}\) NGOs are involved in investigations and expose harm and offender wrongdoing.\(^{214}\) Given the fact that governments often only provide weak resources to combat environmental crimes and accelerate environmental protection, NGOs have to fill the gap.\(^{215}\) Some of them even have an “official” assignment from the government. Others do not have an official task, but are still vital to collect evidence, which can be shared with enforcement agencies.\(^{216}\)

Among the key NGOs are well-known organisations such as Sea Shepherd, Greenpeace or the World Wildlife Fund for Nature. The overall list expands into the thousands and ranges from global players to small local conservation organisations.\(^{217}\) The sphere of activity of these NGOs varies widely among the different organisations, whereby some are highly specialised in one particular field and others are following a more general approach for

\(^{210}\) White “NGO Engagement in environmental law enforcement: Critical reflections”, above n 193, at 4.
\(^{211}\) Drumbl, above n 199, at 149; Nelleman Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the World’s Tropical Forests, above n 202, at 8.
\(^{212}\) Soroos, above n 48, at 25; White “NGO Engagement in environmental law enforcement: Critical reflections”, above n 193, at 4, 7.
\(^{213}\) White “NGO Engagement in environmental law enforcement: Critical reflections”, above n 193, at 4.
\(^{214}\) At 4.
\(^{215}\) At 4.
\(^{216}\) At 4.
\(^{217}\) At 5.
overall environmental protection. They do not have to have a direct environmental cause, as for example indigenous rights organisations also influence environmental criminal spheres as well. Some NGOs try to support their cause to prevent the breaking of environmental laws with breaking laws themselves.\textsuperscript{218} Illegal entry to animal laboratories, sabotage of machines, blockage of access roads or even adapt a form of “eco-terrorism” are on their list.\textsuperscript{219} This naturally exacerbates the collaboration between officials and NGOs.\textsuperscript{220}

NGOs also reveal flaws in governmental and intergovernmental action. The much-praised CITES agreement is, for example, criticised for its focus on regulation, which is deemed to foster the trade rather than stopping it.\textsuperscript{221} In general NGOs observe, comment during negotiations, investigate, provide intelligence and knowledge and sometimes take action and set new priorities. The role of NGOs ranges from partly official roles funded by a state, public education and evidence gathering.\textsuperscript{222} All this makes NGOs a necessity in effective international environmental law enforcement.\textsuperscript{223}

2.2.2.4 Private sector

Corporations and private individuals should be named here as well. Companies can contribute to the containment of international environmental harm through self-regulation and compliance. Private individuals can do their share in following the law. Without this social engagement the social destruction through environmental damage will not stop, especially in fields where corporate profit is at stake and only weak regulations are in place.\textsuperscript{224}

\textsuperscript{218} At 8.
\textsuperscript{219} At 8.
\textsuperscript{220} At 8.
\textsuperscript{221} At 7.
\textsuperscript{222} At 6.
\textsuperscript{223} At 7.
\textsuperscript{224} Angus Nurse “Introduction” in Angus Nurse (ed) \textit{Critical Perspective on Green Criminology} (Internet Journal of Criminology, 2014) at 7.
2.2.2.5 Stakeholders in total
In line with the wide range of stakeholders on the criminal side, the actors on
the other side are quite varied as well. State sector, public sector and private
sector are involved. There is even the possibility for the same actor being
involved on both sides of the battle.\textsuperscript{225} Despite the fact that there is a lot of
capacity bundling, for example, seen in the existence of the ICCWC, the overall
approach is still quite decentralised and dependent on single players. More cross
sectoral partnerships and cross agency collaboration on both national and
international level need to be installed to tackle international environmental
crimes more efficiently.\textsuperscript{226} This is where the idea of new entities and institutions
comes into play. Chapter Three will discuss potential candidates in that regard.

2.2.3 International environmental crimes in the international environmental
law regime
Modern international environmental law started off with slow steps. It was not
until the beginning of the 1970s that international environmental law developed
into a main area of international law. Before that there were only scattered
agreements or decisions in regards to the global environment. Not even the
foundation of the United Nations in 1945 paid serious attention to the
environment. The community of states faced numerous problems on economic,
social and humanitarian matters and therefore set different priorities than
protecting the environment.\textsuperscript{227}

The 1972 Stockholm Declaration was the first major landmark agreement
for the development of modern international environmental law and from
thereon the development-steps increased in length and power.\textsuperscript{228} This
Convention was followed by the memorable United Nations Conference on
Environment and Development in Rio 1992, the 2002 World Summit on
Sustainable Development in Johannesburg, and other approaches to govern the

\textsuperscript{225} United Nations "UN, China join forces to combat environmental crime" (17 May 2017) United
Nations News Centre <\url{www.un.org}>, Environmental Investigation Agency \textit{Appetite for
destruction - China's trade in illegal timber}, above n 17, at 8.
\textsuperscript{226} Bergenas and Knight, above n 21, at 93.
\textsuperscript{227} Soroos, above n 48, at 26.
\textsuperscript{228} At 26; Hunter, Salzman and Zaelke, above n 33, at 140.
world’s environment.\textsuperscript{229} Sadly not one of these celebrated milestone agreements specifically gives credit to international environmental crimes, only naming organised crime in general.\textsuperscript{230} The link to international environmental crimes can only be made indirectly, when dealing with the compliance or non-compliance with the provisions of those agreements.

Today international law is a hierarchy of several regimes. International environmental law is just one of many international law regimes.\textsuperscript{231} Despite the fact that international environmental law has made its way into the daily routine of international law, international environmental crimes seem to be underrepresented and therefore underdeveloped. Given today’s scientific knowledge, advanced communication technology and globalisation generally, this slow and imprecise development is quite disappointing. It lets international environmental governance recede into the distance. The committed acts are only seen as minor offences and are not followed by harsh penalties.\textsuperscript{232} Tragically the focus of many influential states in international law is still not on the environment. It shifted, especially after the 11 September 2001, to international terrorism.\textsuperscript{233} But with the discovery of the involvement of terror groups in environmental crimes, the focus melts into one goal.

\subsection{Current legal status of the environment}

The current legal standing of the environment is characterised by weakness. In comparison to humans, the environment or nature does not have any rights or legal bottom lines. Bosselmann states: “there are no specific international rights for nature”.\textsuperscript{234}

The law treats the environment as for the humans to exploit and only provided a guideline for further destruction.\textsuperscript{235} Principle 21 of the 1972

\begin{thebibliography}{99}
\bibitem[\textsuperscript{229}]{Hunter, Salzman and Zaelke, above n 33, at 135.}
\bibitem[\textsuperscript{230}]{Fajardo del Castillo, above n 190, at 6, 12.}
\bibitem[\textsuperscript{231}]{Hisashi Owada, Judge of the International Court of Justice “International Environmental Law and the International Court of Justice” (Inaugural Lecture at the Fellowship Programme on International and Comparative Environmental Law, Pazmany Peter Catholic University of Budapest, 2006.}
\bibitem[\textsuperscript{232}]{Nellemann and others, above n 3, at 25}
\bibitem[\textsuperscript{233}]{Brack “The growth and control of international environmental crime”, above n 9, at 80.}
\bibitem[\textsuperscript{234}]{Bosselmann, above n 145, at 267.}
\bibitem[\textsuperscript{235}]{John Y Pearson “Toward a Constitutionally Protected Environment” in Steve Vanderheiden (ed) \textit{Environmental Rights} (Ashgate, Farnham, 2012) at 425.}
\end{thebibliography}
Stockholm Declaration basically grants every state the right to exploit its natural resources no matter what, which is basically an ownership by the state of its environment.\(^\text{236}\) Of course, principle 21 of the Stockholm Declaration restricts this right through the fact that no other state may be harmed, but that does not change the fact that the environment is reduced to a “thing” that can be possessed and processed. However, through the continuous and intensifying degradation of the environment, the process of realisation that this actually violates rights began.\(^\text{237}\) A growing number of states now attribute more rights to the environment, either explicitly, via judicial interpretation or other constitutional guarantees.\(^\text{238}\) Bolivia dedicated a separate law to the environment, which grants nature the right to life, biodiversity, clean air, water, equilibrium, restoration and freedom of pollution.\(^\text{239}\) The state of Ecuador took a different approach and implemented in its 2008 constitution a chapter for the Rights of Mother Earth.\(^\text{240}\)

The question is, whether the environment has its own standing or only a secondary standing related to people suffering from a destroyed environment? Pearson states, that “the right of environment would protect the public from unreasonable environmental harm”.\(^\text{241}\) It is highly debateable, whether animals, plants, nature or future generations have a legal standing or their own “rights” and to answer this question would go far beyond the scope of this thesis. However, having rights opens doors to legal aid, courts and justice. Referring rights to environmental entities means giving them a way to claim something against someone.\(^\text{242}\) This is, for example, important for animals regarding wildlife crime and future generations inheriting a much less pleasant place than the current generations lived in through several forms of international


\(^{237}\)Pearson, above n 234, at 426.


\(^{239}\)Bolivian Law of the Rights of Mother Earth (2010); Mehta and Merz, above n 41, at 5.

\(^{240}\)Mehta and Merz, above n 41, at 5.

\(^{241}\)Pearson, above n 234, at 473.

environmental crimes. A development like this would simplify the understanding of the general penalisation of harming natural entities.

Is an international environmental crime a crime against the environment or a crime against the people? This is important to set out, because the “environment” has a lower standing than people in a criminal law point of view. The answer to this question follows an anthropogenic approach. The primary target is about preventing harm to humans, even if a goal is to protect the environment. Not all efforts to criminalise environmental harm are done to protect the environment or the “people”. Many laws or actions are simply designed for economic, political or security reasons. Colombia was, for example, pushing to criminalise illegal mining internationally, because of the financial gain rebel groups, such as FARC, were gaining from illegal mining. Again this takes an anthropogenic point of view. That does not exclude the fact, that the most serious crime humanity is committing is currently against itself and future generations.

Throughout the centuries and especially during the last decades humans have developed “powers” to change the planet, which can particularly be seen in the change of the Earth’s climate. Power in general is controllable, but these powers are not. The Homo sapiens has developed a possibility of thinking, but not a way to outsmart the laws made by nature. It is more than ironic that the rise of the human race to the predominant position on Earth at the moment is simultaneously threatening the survival of the same species. The environment is the basis of all life and the human species is at stake here, which should be kept in mind. Saving this means, in very drastic words, eventually saving humanity itself. It has to be understood that all intervention in nature or the exploitation of resources comes with a price tag. Maybe not a direct financial sum, but a form of “Earth value” needs to be included in all human actions.

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243 At 262.
244 Jamasmie, above n 119.
245 South, above n 11, at 213.
247 At 1.
248 Mehta and Merz, above n 41, at 7.
249 At 7.
Whether there is such a thing as biotic rights is a question of enormous controversy and cannot be answered here, but it is clear that, even if anthropogenic views are applied, humans have at least specific moral duties and moral obligations in their relationship to the environment. The legal status of the environment can therefore be located somewhere in between possession and an independent entity. There will be eventually a status granted to the environment, but this still needs lengthy development. This current washy status makes it difficult to criminalise acts harming the environment as a crime entails the violation of the rights of a victim. It underlines the need for a change in the way the environment is widely seen today to open up for a development of international environmental crimes.

2.2.3.2 Multilateral Environmental Agreements

Treaties are the typical and most important instruments on international level.250 The Statute of the International Court of Justice lists them as the first source of international law.251 These agreements often mark the starting point for the development of rules and regulations regarding the international community. Therefore it is necessary to take a look at the existing treaties and conventions potentially relevant to international environmental criminal law.

As most of the international environmental law regime is based on treaties, the basic concept of “pacta sunt servanda” applies.252 Any violation of a treaty would ipso jure result in an injury of the rights of another state and trigger state responsibility.253 There are many treaties and together they cover a lot of ground, but their effectiveness is dubious.254 First of all, treaties are necessarily the result of consuming and complex negotiations.255 The conflicting interests of states lead to a need to find compromises, which then often leads to

251 Statute of the International Court of Justice 33 UNTS 399 (opened for signature 26 June 1945, entered into force 24 October 1945), art 38(1).
252 Owada, above n 230.
253 Owada, above n 230.
254 Erbguth and Schlacke, above n 182, at 155.
255 Soroos, above n 48, at 44.
weak documents that operate at the level of the lowest common denominator. States cannot be forced to something against their will and so all countries tend to seek treaties that maximise the responsibility of other nations and minimise their own. No state wants to lose part of its sovereignty and that is why these treaties are often more political declarations of intent. Even if commitments are made they do not go far enough and cover mostly what is covered under national law anyway. The implementation of international norms in national law is left to the states and there is no hard instrument to force adoption of specific norms. The enforcement in case of non-compliance with treaty obligations may be pursued through various diplomatic and legal means, ranging from negotiation through arbitration and formal adjudication. Some treaties even have their own dispute resolution scheme, such as in article 288 UNCLOS. However, often almost no means are set out in the treaty for non-compliance with treaty obligations. A popular and vexed example from the recent past is the 2015 Paris Agreement on Climate Change. This agreement received a lot of media attention and only one year later the biggest greenhouse gas producers of the world, USA and China, ratified the agreement. However, the agreement does not set any penalties for non-compliance, which dilutes the strength on first sight.

In 1998 the Council of Europe introduced the Convention for the Protection of the Environment through Criminal Law, aimed at harmonising criminal policy and law for the protection of the environment. The Preamble of this Convention notes the “need to pursue a common criminal policy aimed at the protection of the environment” due to unregulated industrial development, uncontrolled use of technology and the serious consequences of environmental

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256 At 44.
257 At 44.
258 Erbguth and Schlacke, above n 182, at 155.
259 At 155.
262 Birnie and Boyle, above n 237, at 283.
This Convention names under article 2 and 3 certain intentional and negligent offences harming the environment specifically as criminal acts. Article 2 of the Convention states, that an act is criminal when it is unlawful, intentional and reaches a threshold of substantial injury. This includes acts such as the unlawful disposal or treatment of hazardous waste which may cause death or serious injury to a person or substantial damage to environmental quality. This can generally be seen as a step forward in international environmental criminal law. However, the Council of Europe Convention refers all authority regarding jurisdiction and sanctions to the domestic level. Article 12 of the Convention refers to measures at international level, but limits these international measures to cooperation and bilateral assistance between the state parties. "Convention for the Protection of the Environment through Criminal Law" sounds like a door opener for international environmental crimes in international relations, but this Convention only presented a minimum common standard, with a very general character unlikely to wield much influence on environmental governance. The European Union Directive 2008/99/EC on the protection of the environment through criminal law aims to harmonise environmental criminal law among the member states. Again, its focus is to harmonise the domestic laws in respect of environmental crimes and does not entail an internationally coordinated oversight mechanism for environmental harm through criminal activities. But the mere existence of this Directive is a sign for the acknowledgement of the problem of international environmental crimes and a step forward for the handling of criminal activity with regards to the environment within the EU.

The vast majority of MEAs cannot be seen as direct agreements for criminalising environmental harm. Most of these treaties do not contain any criminal enforcement provisions with links to criminal law. However, there are

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264 Convention for the Protection of the Environment through Criminal Law, above n 262, art 2, 3.
266 Art 2(1)(c).
267 Art 12.
268 Birnie and Boyle, above n 237, at 283.
some MEAs which can be useful in that regard. The past, especially the recent past, has produced a number of MEAs with possible influences on international environmental crimes, for example, the aforementioned CITES, Montreal Protocol and Basel Convention. They could help to harmonise global rules regarding the environment and therefore for international environmental crimes, too.

The following four treaties refer to the three examples of international environmental harm discussed in Chapter One, and provide examples of MEAs with possible influences on international environmental crimes.

2.2.3.2.1 CITES and ICRW
In its preamble the CITES agreement underlines the urgency of taking appropriate measures to protect wild fauna and flora from international trade. The objective of CITES is to protect endangered species through regulation of their trade.\textsuperscript{270} In a sense criminal enforcement measures are part of an appropriate package of measures to set out boundaries and ensure compliance. The CITES Secretary stresses the relevance of crime in the sphere of wildlife and underlines the seriousness of the issue.\textsuperscript{271} However, CITES itself does not set out any penalties for handling wildlife in any way. Instead it divides certain endangered species into three appendices and impose different trade regulations on all three of these appendices, with Appendix I presenting the strongest restrictions.\textsuperscript{272} The agreement leaves a wide latitude for the national law of the parties to apply and grants numerous exceptions, even for the allegedly strongest protection under Appendix I.\textsuperscript{273} CITES allows the states to adopt regulation beyond the rules set out by the CITES agreement.\textsuperscript{274} Through article 14 of the CITES agreement states can impose sanctions aimed at non-compliant member states through domestic measures. Several states in the past have used this mechanism to punish other states for infringements of the CITES

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\textsuperscript{270} CITES, above n 130, art 1(b).
\textsuperscript{271} CITES Secretary “Wildlife crime” CITES <www.cites.org>.
\textsuperscript{272} CITES, above n 130, art 2.
\textsuperscript{273} CITES, above n 130, art 3(2), art 7.
\textsuperscript{274} CITES, above n 130, art 14(1)(a).
}
However, most trade in endangered wildlife is still allowed with specific state permits. Especially this exception opens the door to criminal activities, such as corruption, fraud or forgery.

Interestingly CITES orders the state parties to set out penalties for trade or possession of listed species in article 8(1)(a) of the Agreement. This provision leaves the criminal aspect of international wildlife crime out in the cold and refers the matter to the states. CITES does not criminalise contraventions of any of its provisions directly. The ICRW, which regulates whaling in the world’s oceans, contains a similar provision to article 8(1)(a) of the CITES agreement. Article 9(1) of the ICRW transfers the responsibility for appropriate punishment of infractions against the provision of the ICRW to domestic level. This demonstrates on the one hand that penalisation is a welcome measure to ensure compliance with the provisions of the conventions and on the other hand that CITES and ICRW are not primary sources for punishment of non-compliance. Both agreements do not work as a distinct punishment or criminalisation scheme.

To overcome the issues of the flourishing international trade in wildlife and the ties to organised crime, the ICCWC was launched in November 2010 by an alliance of several international operating entities. The Letter of Understanding, establishing the ICCWC, points out that the institutions teaming up in the ICCWC are combining their powers to tackle international wildlife crimes. The purpose of this coalition is mainly to provide coordinated support to national law enforcement agencies. This concentration of power in fighting wildlife crimes is, of course, a welcome development, but also highlights again the major problem with current international efforts to tackle wildlife crimes and international environmental crimes in general: the actual last step of criminalisation is left to the nation states.

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278 Van Asch, above n 275, at 472.
CITES and the ICRW reflect the opinion of the global community on what interference with wildlife is lawful and what interference is unlawful. Both MEAs provide a starting point for the states to set up penalties and criminal charges for contraventions of their provisions, but they do not set out direct criminal provisions in their texts.

2.2.3.2.2 Montreal Protocol

The Montreal Protocol lays out the state parties’ obligations in regards to ozone-depleting materials, but it does not define illegal activities under the Protocol. Interestingly the introduction of the Montreal Protocol gave way for a new form of criminal activity itself: the international oversight of trade in ODS led to the creation of the ODS black market in the first place, as described in Chapter One. Legal trade in ODS was shifted into illegal trade on the way to the phase out of all ODS. The criminal act includes all violations of ODS-related laws, for example, the import or export of ODS. Today this area is recognised as a prime example for international environmental crimes, despite the fact that the Montreal Protocol itself does not contain criminal provisions. The Montreal Protocol does not even contain a provision advising the state parties to penalise non-compliance with the rules of the Protocol, such as the aforementioned article 8(1)(a) of the CITES agreement.

As a result of the growth of illegal trade in ODS the Protocol was amended in 1997 with a requirement to set up an import and export licensing system for a better surveillance of the overall trade in ODS. This monitoring system is a comparatively weak answer to the flourishing trade and had only a limited effect on the illegal black market. Furthermore this amendment left out any cross-checks of the licensing information provided by states on the

280 At 214.
281 At 214.
283 Banks and others, above n 9, at 16.
import and export of ODS, which provided a loophole for illegal trade.\textsuperscript{284} Improvements to this licensing system were made, but as part of merely voluntary suggestions for the state parties by the Meeting of the Parties of the Montreal Protocol.\textsuperscript{285} However, no decisions of the Meeting of the Parties of the Montreal Protocol required or even advised the member states to adapt national criminal laws outlawing the trade in ODS.\textsuperscript{286} Similar to the CITES agreement, the focus of enforcement of the Montreal Protocol lies within the domestic authorities.\textsuperscript{287} The Montreal Protocol itself is more a stimulus to cooperate in law enforcement in the sphere of ODS-related matters.

2.2.3.2.3 Basel Convention

The Basel Convention introduces an interesting novelty in regards to the criminalisation of international environmental harm. In contrast to CITES, the ICRW or the Montreal Protocol the Basel Convention specifically names an illegal activity in environmental matters expressly as a crime. Article 9 of the Basel Convention shows actions regarding the waste sector deemed to be illegal and article 4(3) of the Basel Convention states that “the parties consider that illegal traffic in hazardous wastes or other wastes is a crime”.\textsuperscript{288} That means that any form of illegal traffic in hazardous waste or other wastes is to be considered as criminal. In this regard the Basel Convention remains an exception. Article 4(4) contains an appeal to the state parties to the Basel Convention to take measures for the prevention and punishment of non-compliance with the Convention’s regulations. Again the main focus for possible criminal charges and their enforcement lies within the domestic level.\textsuperscript{289} But in case of the Basel Convention this means that the member states have to implement criminal

\textsuperscript{284} Liu, Somboon and Middleton, above n 278, at 218.
\textsuperscript{285} Meeting of the Parties of the Montreal Protoclo Decision XVIII/18 (2006); Meeting of the Parties of the Montreal Protocol Decision XIX/12 (2007).
\textsuperscript{286} Antonio Cardesa-Salzmann “Multilateral environmental agreements and illegality” in Lorraine M Elliot, William H Schaedla (ed) Handbook of transnational environmental crime (Elgar, Northhampton, 2016) at 309.
\textsuperscript{287} At 313.
\textsuperscript{289} Cardesa-Salzmann, above n 285, at 313.
measures and enforce contraventions of the provisions of the Convention.\textsuperscript{290} Hence, the Basel Convention holds hard law obligations to comply with its rules regarding the handling of hazardous waste.\textsuperscript{291} The regulations within the Basel Convention are therefore closer to a criminal solution than the other aforementioned examples. Article 9(2)-(4) of the Basel Convention underlines this perception by allocating responsibility to member states concerned with illegal waste movements under the Convention.

Nevertheless, the actual organs of the Basel Convention and their enforcement powers are quite weak.\textsuperscript{292} States accused of being involved in illegal handling of hazardous wastes have to cooperate, and the Secretariat of the Basel Convention has no enforcement power out of its own.\textsuperscript{293} Again the action for criminal enforcement is left to the national states.

2.2.3.2.4 Other relevant agreements and sources

Next to MEAs the landscape of international law offers some additional sources relevant for international environmental crimes.

Due to the complexity of the topic of international environmental crimes in general the search for potential sources should not only be within the sphere of MEAs. International environmental crimes are linked to other criminal and non-criminal areas of international law and cause side effects, such as corruption or tax crimes, which then can be part of cross cutting solutions.\textsuperscript{294}

The influence, for example, of the economy on the environment should not be underestimated. The global economy is probably the most internationally governed area. The General Agreement on Tariffs and Trade (GATT), which is the leading treaty in economic regards, does contain a small reference to the environment. Only article XX of the GATT allows exceptions, for example in regards to the protection of animal or plant life or health and for the

\textsuperscript{290} Basel Convention, above n 287, art 4(4); Andre Nollkaemper “Compliance control in international environmental law: Traversing the limits of the national legal order” (2002) 13 Yearbook of International Environmental Law 165 at 170.
\textsuperscript{291} Cardesa-Salzmann, above n 285, at 310.
\textsuperscript{292} At 310.
\textsuperscript{293} Basel Convention, above n 287, art 16(1)(i).
\textsuperscript{294} Banks and others, above n 9, at 24.
conservation of natural resources. The famous GATT decision regarding an embargo on the import of tuna species by the USA underlines the tension between the environment on the one side and free trade on the other side. Free trade and the environment are clearly linked. Free trade results in increased pollution and resource depletion, whereas on the other side traders fear that environmental protection might hinder open markets. Concerns about sinking of environmental standards led to demonstrations in connection to the free trade agreements CETA and TTIP.

The famous GATT decision regarding tuna and dolphin catches was seen as an affront against the sovereignty of the USA. The panel concluded that the import ban on tuna issued by the USA did not meet the requirements under the GATT and did not qualify for the exceptions of article XX of the GATT. The decision proves that trade liberalisation can trump environmental value, especially when environmental policies between developed and developing countries differ.

Differences in environmental standards are an important component of comparative advantage. For example, it is possible that hazardous materials travel in the so called “circle of poison”, meaning the material might be lawfully traded in one country, but not in a neighbouring country. This could result in smuggling or even in harm in both countries through wind or imported goods. Countries with lax environmental laws actually have competitive advantages as it is cheaper to produce certain products without worrying about environmental regulations. It should be the other way round: environmental protection should

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295 General Agreement on Tariffs and Trade 55 UNTS 187 (opened for signature 30 October 1947, entered into force 1 January 1948), at XX.
298 At 158.
299 Comprehensive Economic and Trade Agreement (CETA); Transatlantic Trade and Investment Partnership (TTIP).
300 Esty, above n 296, at 157.
301 United States – Restrictions on Imports of Tuna, above n 295.
303 Esty, above n 296, at 159.
304 Selin, above n 172, at 155.
be rewarded with competitive advantage at the same time. An interlinkage of both can, however, result in an improvement of sustainable development. It has to be kept in mind that long-term economic growth is only possible with a careful stewardship of natural resources and the environment. That is why treaties not directly targeting international environmental crime or even international environmental law in general need to be included for the development of a body of comprehensive international environmental criminal law.

Customary law and general principles of law cannot be traced directly to international environmental crimes, but they help by building up a general frame for behaviours complying with the rules agreed upon by the international community regarding the environment. The *Trail Smelter Arbitration* in 1941 established that “no state has the right to use or permit its territory in such a manner as to cause injury in or to the territory of another state” (sic utere tuo ut alienum non laedas). This was confirmed later multiple times, for example, in principle 21 of the Stockholm Declaration. This is not directly aimed at international environmental crimes, but it provides some sort of responsibility scheme. This principle can be used to determine possible international environmental crimes, when, for example, the territory of a state is knowingly polluted from the territory of the other state.

All in all a single source for international criminal law does not exist. There is no International Criminal Law Convention or an International Environmental Criminal Code, where the crimes are listed specifically. This area of law is a melting pot of various sources and under continuous development.

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305 Esty, above n 296, at 155.
308 Fajardo del Castillo, above n 190, at 9.
2.2.3.3 The involvement of human rights in international environmental crimes

It is unsettled, whether there is an enforceable human right to the environment that ensures environmental protection and a standard of environmental quality, and prohibits certain behaviours.

A human right like this would widely influence the criminal scheme in international environmental law, because environmental degradation through criminal acts would directly affect this human right.

2.2.3.3.1 The environment and human rights

Human rights inhere the power of universality and can go beyond administrative, political, ideological, social and cultural barriers. They are getting more and more recognised as higher-ranked universal values with a powerful moral force exuding into all aspects of life. Within this development new forms of rights are evolving. Many of these newly evolving human rights, as, for example, the human right to water, are tied to the environment. The right to water was finally recognised within the General Assembly of the UN in July 2010. This right shall ensure “water justice” among all people and solve the critical need for water in some regions. This development underlines the dynamics in this area and shows that a right to a healthy environment is not only a utopia. An implementation of environmental human rights would further outlaw environmental damage and therefore help to develop international environmental crimes. The circumvention of these rights is more likely to pose a criminal act and receive more attention in general.


312 Farhana Sultana and Alex Loftus “The Right to Water - Prospects and Possibilities” in Farhana Sultana and Alex Loftus (ed) The Right to Water - Politics, Governance and Social Struggles (Earthscan, London 2012) at 1.
The established human rights to life, health, clean air and water form a base for a human right to live in a healthy environment. They are already tangent to the Earth’s vital and stressed capacities to produce oxygen, food and medicines, or a stable global climate. Furthermore, it is clear that many, if not all, human rights have an environmental element. In fact, environmental aspects, such as anthropogenic climate change, have the power to violate some of the most basic human rights, for example, the rights to life, physical security, subsistence and good health. These rights cannot be fully enjoyed without a functioning and healthy environment. The connection of other human rights to the right to a healthy environment can be seen in the Yanomani Indians v Brazil Case. A road built through the territory of the Yanomani tribe was found to violate its members’ rights to life and health under the American Declaration of the Rights and Duties of Man. In addition to that a lot of other rights are violated through environmental degradation, such as the security of the person, an adequate standard of living, freedom from hunger, social security, safe work environment as well as cultural and religious rights. Some use this connection of most if not all human rights to the environment to speak of a redundancy of an independent right for a healthy environment. However, declaring an environmental human right to be therefore redundant misses the point, which is to do with improving our management of the environment, where an explicit human right would set a huge example.

2.2.3.3.2 The human right to a healthy environment
Every human right in international law derives from the need to ensure a peaceful enjoyment of life for all humans on the planet. Again this function could not be reached without ensuring environmental conditions for an

313 Gray, above n 160, at 222; Mehta and Merz, above n 41, at 7.
314 Gray, above n 160, at 222.
317 Yanomani Indians v Brazil (Judgment) Inter-American Court on Human Rights Case 7615 12/85, 5 March 1985.
318 Gray, above n 160, at 223.
319 Birnie and Boyle, above n 237, at 258.
320 Postiglione, above n 308, at 324.
appropriate human life. The idea of a human right to the environment started with the 1972 Stockholm Declaration and can now be seen as well established within the international human rights regime. In 1994 the United Nations Economic and Social Council (ECOSOC) set out a Draft Declaration of Principles on Human Rights and the Environment, which set out the interlinkage of human rights, healthy environment, sustainable development and peace. The principles grant a right to freedom from pollution or environmental degradation and identify a duty to protect and preserve the environment on the other hand. This draft never found enough backing through the state community.

Nevertheless, in the course of the last decades the significance of the close interlinkage of an adequate way of life and the environment has become increasingly recognised in international human rights law as well as in international environmental law. In the last few years there is even an increasing recognition that the right to a clean and liveable environment grows to a fundamental civil and human right. Berat locates the right to a healthy environment not only as customary international law, but in the sphere of jus cogens, because of its tremendous significance.

However, the human right in question comes with some issues. It suffers, for example, from cultural relativism, which means that there is no stringent common international universal value for the environment or for a human right to the environment. This leads to the fact that there is no agreed upon definition, which causes uncertainty among human rights. Another problem is that human rights are seen as rights for individuals and not as communal rights,

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321 At 324.
327 Universal Declaration of Human Rights (1948), art 3; McCallion and Sharma, above n 249, at 364.
328 Berat, above n 2, at 339.
329 Birnie and Boyle, above n 237, at 256.
330 At 256.
which leads to the limitation of cases where environmental harm affects individual claimants.\textsuperscript{331} The fact that the environment is a common good is hereby ignored and not properly addressed.\textsuperscript{332} The primary focus of human rights is an individualistic and disconnected one and not one which encompasses indivisible, interdependent and interrelated environmental elements.\textsuperscript{333} Furthermore, international human rights treaties rely on state parties to secure the embedded rights and freedoms for everyone within the reach of its jurisdiction.\textsuperscript{334}

2.2.4 Enforcement regarding international environmental crimes

Criminology becomes more and more internationalised and globalised.\textsuperscript{335} International enforcement is a crucial point.\textsuperscript{336} The currently existing lack of international enforcement power can undermine all efforts to save the planet’s environment with effects on society, economics, politics, public health, state security and of course the environment.\textsuperscript{337} The described problem simply cannot be addressed by only toughening domestic or international law.\textsuperscript{338} Without criminal enforcement almost no progress can be made in tackling international environmental harm, as there would be nothing to fear for perpetrators. Compared to the “war on drugs” the political devotion to environmental issues is derisive.\textsuperscript{339}

Up to now international law in general does not offer a clear response to the need to punish states or individuals for environmental wrongs, as explained above. The majority of declarations are not equipped with any real enforcement power. There is no direct international individual criminal penalty for not following the rules set out by MEAs or other agreements with ties to the environment.\textsuperscript{340}

\textsuperscript{331} Grant, above n 314, at 156.
\textsuperscript{332} At 156, 158.
\textsuperscript{333} At 157, 158.
\textsuperscript{334} Birnie and Boyle, above n 237, at 265.
\textsuperscript{335} Boekhout van Solinge, above n 112, at 504.
\textsuperscript{336} Freeland, above n 14, at 115.
\textsuperscript{337} Andrade, above n 29, at 164.
\textsuperscript{338} South, above n 11, at 218.
\textsuperscript{339} Brack “The growth and control of international environmental crime”, above n 9, at 80.
Environmental harm is often seen as “non-criminological”. The study of international environmental crimes has therefore a lower priority among criminologists and law enforcers than other more traditional vices. In addition to this lack in attention, there is a serious lack of resources for investigation and enforcement agencies. Unfortunately the whole area of international environmental harm suffers from a lack of political will. This woolly status of enforcement cannot be a real answer on criminal wrongdoings.

But it is exactly the enhancement of political will and enforcement that is needed to prioritise of international environmental crime. The variation of what is legal and what is illegal throughout the different countries, as well as the differences in enforcement capacities of various governments, especially between least developed countries (LDC) and developed nations, hinders an effective approach. In addition to this, many LDC suffer from an underdeveloped judicial sector in general. Therefore the combination of all global efforts should be taken into account. International oversight might be a better option. The general capacity for law enforcement has to be expanded in order to obtain more intelligence to be able to lead more targeted investigations and interventions based on the analysis of the collected information. The key to more success in enforcement is a targeted and strict approach deployed alongside with prevention measures. To burst the low-risk high-profit scheme of international environmental crimes the tightening of penalties might be an option. More effective in prevention would probably be the issuing of heavy fines and penalties for all sorts of environmental wrongs. That would make it harder for the perpetrators to factor in fines. Furthermore an international-

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341 Boekhout van Solinge, above n 112, at 504.
342 At 504.
343 Nellemann and others, above n 3, at 9.
344 Davies, above n 95, at 62.
345 Nellemann and others, above n 3, at 25.
346 At 25.
347 At 39.
348 Fajardo del Castillo, above n 190, at 12.
349 Davies, above n 95, at 63.
350 At 45.
351 United Nations Office on Drugs and Crime, above n 62, at 3.
352 Rosencranz and Johar, above n 11, at 76.
transparency scheme would ensure sufficient monitoring.\textsuperscript{353} To rely on NGOs to a great extent is not a preferable solution.\textsuperscript{354} States or intergovernmental organisations should be the key players.

2.2.5 Projects targeting international environmental crimes

In combatting international environmental crimes, projects occupy an important space. There are projects in various areas of international environmental crime, for example, in tackling fisheries crimes, wildlife crimes or illegal logging.\textsuperscript{355} They are carried out either by national states or international organisations, NGOs or private institutions with the help or blessing of the national states. However, it is often difficult for enforcement operations and investigations on multinational level to operate, as many of the participating states have varying laws, procedures and priorities, which can create conflicts between them.\textsuperscript{356}

Noteworthy in that regard are the efforts made by INTERPOL. This unique international police force is ideally placed to lead the law enforcement aspect in international environmental crimes.\textsuperscript{357} The world's largest international police organisation formed an Environmental Security Sub-Directorate and maintains several projects tackling environmental harm. INTERPOL and its Environmental Security programme coordinate and support several regional and global operations designed to dismantle the illegal networks behind environmental harm, offering support to member countries during planning as well as operations combatting certain environmental harm.\textsuperscript{358} Examples of these projects are those, named Wisdom (to combat trade in ivory and rhino horn), Predator (to save the last wild tigers), Leaf (to tackle illegal logging and trade in timber) and Scale (to target activities undermining and threatening the sustainability of marine living resources; food security and economic, social and political stability of states dependent on the fisheries

\textsuperscript{353} Davies, above n 95, at 62.
\textsuperscript{354} Nurse, above n 223, at 4.
\textsuperscript{355} Ian Urbina "Palau vs the Poachers" (17 February 2016) New York Times <www.nytimes.com>; Himbert, above n 6, at 22.
\textsuperscript{356} Andrade, above n 29, at 160.
\textsuperscript{357} Himbert, above n 6, at 21.
\textsuperscript{358} INTERPOL and UNEP Strategic Report: Environment, Peace and Security - A Convergence of Threats, above n 198, at 9; Himbert, above n 6, at 22.
sector). With other similar projects, respectively operations conducted in the past INTERPOL achieved great success. Operation Wendi (to target criminal networks behind the trafficking of ivory in some African countries) and operation Lead (to combat illegal logging operations in Central America) in 2013 resulted in seizures of illicit material and many arrests. Similar to INTERPOL the South Asia Nations Wildlife Enforcement Network (SAWEN) established in 2008 and the Horn of Africa Wildlife Enforcement Network (HAWEN) created in 2013 form regional mandates allowing for greater levels of law enforcement cooperation, especially targeting wildlife trafficking.

A national project was the Brazilian Plan for Protection and Combatting Deforestation in the Amazon (PPCDAM), which helped to reduce the deforestation in the Amazon region and was celebrated as a huge national effort. Reducing overall deforestation of rainforests through illegal logging is one of the most effective ways to fight emission of climate gas. The results of types of projects with wide positive impacts underlines why they are so important.

These projects are still taking place on a small scale and are not suitable to tackle the problem of worldwide environmental degradation in general. They are a mere drop in the bucket. In fact, efforts so far to respond to wildlife crimes have lead to rising prices on the world market, attracting more criminals as the profit scheme improves even more. The burning of seized ivory in many African countries catches a lot of media attention. This attention is, of course, a sign for criminals that the participating governments are not tolerating poaching for ivory and its trade. The burning of the stockpiled ivory also sends the message that ivory has no value and trade should be banned, but it is not uncontroversial, as it again increases the price for ivory products.

359 Himbert, above n 6, at 20-21.
361 Bergenas and Knight, above n 21, at 125.
362 Nellemann and others, above n 3, at 12.
Projects do not always demand a criminal investigation and intervention, but also can be of educational sort. Educating people about the disastrous impacts of international environmental crime is one major pillar in a comprehensive approach to addressing environmental criminality on a global scale and can perhaps be seen as the most effective way to reduce environmental harm.\textsuperscript{365} A well-informed public can both contribute to a respected and enforced international justice in general, and help reduce environmental crimes in the first place, because of the understanding of the broad environmental contexts. Some projects therefore aim for the education of the public, businesses and also lawmakers to inform them about the dangers of international environmental harm.\textsuperscript{366} However, education alone cannot bring the needed change.

2.2.6 \textbf{International jurisdiction in regards to international environmental crimes}

The judiciary in general plays a vital role in the improvement of the public interest in a healthy, secure and sustainable environment.\textsuperscript{367} But what is international criminal justice in the first place? At the most basic level, international criminal justice is a thin membrane of law overlaying on the domestic and regional criminal justice systems of the world. It is located in a different sphere than national criminal sanctioning, but is still dependent on the national level, which is influenced by whether a monist or a dualist approach to international law is applied in the jurisdiction concerned. Either way, both realms are intertwined and the national level plays an important role as a “base”, especially for the detention of suspects, gathering of evidence and witnesses and also enforcement.

There are different ways to exert international criminal jurisdiction. Extraterritorial criminal jurisdiction means the capacity of a state to prescribe and enforce certain laws under international law, which can be seen, for example, in the fact that flag states remain responsible of ships in the high

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\textsuperscript{365} Brack “The growth and control of international environmental crime”, above n 9, at 80.
\textsuperscript{366} Himbert, above n 6, at 21.
On the other hand there is universal jurisdiction, which entitles a state to prosecute any offence even without a distinct connection to the perpetrator. Universal jurisdiction is solely based on the fact that the whole state community bans the actions of the perpetrators. This idea is derived from international humanitarian law, which arguably includes a healthy environment. Most MEAs have introduced their own compliance regime. But even if these MEAs prohibit and even criminalise certain behaviour in regards to the environment there is no international judicial institution for criminal sanctioning in environmental matters.

Some international institutions, such as the International Criminal Tribunal for the former Yugoslavia (ICTY) and the International Criminal Tribunal for Rwanda (ICTR) were set up with temporary jurisdictional power for a specific case. The only current international forum with permanent international jurisdiction is the International Criminal Court, which will be discussed below. However, the jurisdiction in most cases regarding possibly criminal acts against the environment remains still within the national states.

2.3 Conclusion

After taking a closer look on the current mechanisms to combat international environmental crimes it becomes quite obvious, that the regulations in place are not capable of reining in the development of these crimes and protecting the environment. The development of international environmental crimes inside this international framework can, nevertheless, be described as underdeveloped.

The example of the Basel Convention shows that there is a precedent of the existence of criminal wrongs in international environmental law in form of treaty obligations. The MEAs discussed are certainly a step in the right direction, but do not offer the urgently needed legal guidelines to overcome

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368 Birnie and Boyle, above n 237, at 283.
369 At 284.
371 E.g. the Montreal Protocol (Meeting of the Parties of the Montreal Protocol Decision IV/5 (1992)); Basel Convention (Conference of the Parties Decision IV/12 (2002)).
372 Berat, above n 2, at 341.
international environmental harm. The question, whether the present mechanisms are strong enough to solve the problem of international environmental harm, has to be denied. The system in place is characterised by weakness, inefficiency and relies mostly on deregulation and voluntary compliance. ³⁷³ Despite the general development to more environmental protection and environmental sensibility in every subject matter and on local, national and international levels, there is no sign that environmental destruction through human action is slowing down. The efforts made in this field are clearly not enough to curb the problem of international environmental crimes.

Success in parts of international environmental crimes, such as INTERPOL’s work in investigating wildlife crime, are, of course, highly welcome, but they only scratch the surface of one of many areas within potential the international environmental criminal law regime.

Chapter Three

The idea of criminalisation

How could international jurisdiction of international environmental crimes fit in the landscape of international law?

3.1 Introduction
Chapter One addressed the potential threat of international environmental harm in absence of criminalisation and Chapter Two outlined the weak compliance role of international law and institutions so far. This chapter focusses on the idea of international criminalisation of international environmental harm in the future. Can international criminalisation help to contain the environmental degradation? What ideas are in existence to tackle international environmental crimes with jurisdictional means on the international level? These questions need to be addressed first in order to introduce different possible judicial fora for international environmental crimes.

3.2 The need to involve of international bodies
Chapter One revealed that states cannot hide behind their national borders or their own national laws to fight environmental crimes, because the issue is transboundary by its very nature. In the end planet Earth provides one coherent ecosystem. Any environmental harm following from illegal acts lastly impacts on this one and only ecosystem. Argentina’s minister of the environment, Bergman, speaks of “only one house, we’re all living in”.

Many states have introduced laws criminalising environmental harm. However, some states have not yet passed an environmental criminal law and if they have, they often lack a strong will to enforce their own environmental provisions. This opens doors for environmental “dumping”, competing

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jurisdiction, creeping domestic jurisdiction and waste in prosecutorial resources.\textsuperscript{376} The same failure to criminalise and punish acts harming the environment by states occurs on international level.

3.2.1 A new form of global crime
Nowadays international environmental crimes represent a new form of global crimes with growing recognition.\textsuperscript{377} They are endangering the global human community and create an equally shocking effect to that created by other recognised international crimes, including genocide.\textsuperscript{378}

Globalisation leads to the expansion of the concept of international crimes.\textsuperscript{379} It is simply not possible to solve the problem of environmental crimes solely with the adoption of national laws. Scientists from different backgrounds have an increasingly clear consensus that humans are having a devastating impact on the natural environment and that human activity is even changing the Earth’s climate.\textsuperscript{380} There is evidence suggesting that global laws are needed to govern human behaviour and avoid further irreversible damage to the planet.\textsuperscript{381}

Next to the problem of worldwide impacts the involvement of different nations and therefore different justice systems has to be taken into account as well.\textsuperscript{382} Lots of the destruction takes place in less developed countries, which do not have a properly developed judicial sector, lack financial assets to fund proper investigations and where corruption is common.\textsuperscript{383} The 1983 Bhopal disaster can be named as example for the need of new institutions. The release of toxic chemicals by an American company in India resulted in at least 3,500 deaths and more than 200,000 people affected partly with serious long-term ramifications.\textsuperscript{384} Inter-American courts dismissed the suit against officials of the company on forum non-conveniens grounds, which was partly based on

\begin{itemize}
  \item \textsuperscript{376} At 16.
  \item \textsuperscript{377} At 17.
  \item \textsuperscript{378} At 17.
  \item \textsuperscript{379} Ryan Gilman “Expanding Environmental Justice after War: The need for universal Jurisdiction over environmental war crimes” (2011) 22(3) Columbia Journal of International Environmental Law and Policy 447 at 470; Marchuk, above n 369, at 69.
  \item \textsuperscript{380} ICE Coalition, above n 366, at 6.
  \item \textsuperscript{381} At 6.
  \item \textsuperscript{382} Nurse, above n 223, at 3.
  \item \textsuperscript{383} CITES Secretary, above n 270.
  \item \textsuperscript{384} Mark Magnier and Anshul Rana "India Convicts 7 In 1984 Bhopal Gas Disaster" (7 June 2010) Los Angeles Times <\url{www.latimes.com}>.
\end{itemize}
deference to India’s regulatory and environmental regime.\textsuperscript{385} It was not until 26 years after that India convicted seven officials of the responsible US company Union Carbide and sentenced them to two years in prison for negligence.\textsuperscript{386} These convictions, however, were insignificant in comparison to the damage caused and were only directed against Indian nationals leaving the heads of the company unpunished.\textsuperscript{387} Another downside of these convictions is that they were aimed onto the human victims and had no regard for the vast environmental damage.

3.2.2 The problem of nationalism

The fact that the environment deserves stronger protection under the law is increasingly understood among the international community. However, the world today is witnessing alarming developments in key national states to focus on their own. This retreat on inner state issues, which some propose as a healing factor, can be observed in Great Britain and the USA. Growing movements of this policy of separation are also happening in some other countries of the EU.

For environmental issues it is most notable that a known climate change denier will lead the US Environmental Protection Agency (EPA) under the presidency of Donald Trump.\textsuperscript{388} With this misguided focus and the retreat solely on national interests it will not be possible to solve the worldwide environmental problems. To turn one’s back and run from the mentioned problems will only result in bigger international dilemmas and the problems will catch up eventually. Bosselmann identifies a sovereignty paradox, meaning that states hold on to outmoded ideas even in a situation where only global cooperation can gain a better development.\textsuperscript{389} On the one hand there is a desire of many states to open up for economic reasons and sacrifice sovereignty for economic growth, but there is less cooperation in environmental matters.\textsuperscript{390} The solution for this sovereignty paradox might be differentiation. More sovereignty

\textsuperscript{385} McCallion and Sharma, above n 249, at 353.
\textsuperscript{386} Magnier and Rana, above n 383.
\textsuperscript{387} Magnier and Rana, above n 383.
\textsuperscript{389} Bosselmann, above n 145, at 269.
\textsuperscript{390} At 269.
where needed, less where necessary, whereby the field for international environmental crimes clearly belongs to the areas of necessity.\textsuperscript{391}

3.2.3 \textbf{The need for international governance}

The question remains, where this legal protection is coming from? International environmental law is not only about state relationships, but also touches individuals, people, society, generations, animals and nature.\textsuperscript{392} Inefficiency in regulation making and enforcing of current laws leads to the fact that environmental harm is flourishing today on an international scale.\textsuperscript{393} Of course, there are some MEAs in place trying to harmonise environmental rules, but the uneven degree of incorporation of the regulations set out in these MEAs into the domestic legal systems is an ongoing challenge.\textsuperscript{394} Mismatches, resulting from this uneven incorporation, offer legal loopholes for potential perpetrators of international environmental wrongs.\textsuperscript{395}

This is why there is some sort of reorientation needed in international environmental governance, law enforcement and dispute resolution.\textsuperscript{396} It is therefore of high importance and in the interest of every nation to start governing worldwide environmental problems on a global scale via international entities for coordination, investigation and justice. An international approach can lead to the defence of transboundary environmental degradation, prevention of competitive distortion in international trade and restoration of destroyed areas. The circuitousness and the confusion of these crimes needs a combined approach. In order to have an effective international system combating environmental crimes the international community has to internationalise the systems leading to international justice.\textsuperscript{397}

It is therefore inevitable to empower specific international bodies with the ability to judge about environmental wrongs in the sphere of criminal law.

\textsuperscript{391} At 269.
\textsuperscript{393} Nelleman and others, above n 3, at 4.
\textsuperscript{394} Cardesa-Salzmann, above n 285, at 300.
\textsuperscript{395} At 300.
\textsuperscript{396} Giagnocavo and Goldstein, above n 391, at 347.
\textsuperscript{397} Nurse, above n 223, at 3.
This is why international environmental crimes have to be dealt with on an international level with the involvement of international entities.

3.3 Can criminalisation stop or reduce the harm?

Before plunging into further thoughts regarding the international environmental criminal regime, the question has to be posed, whether more international regulation can solve the ongoing problem? An important question in criminal law in general is, whether criminalisation of any conduct can help prevent the harm of potential victims? Thus, it has to be asked, if international criminalisation of environmental harm can put a stop to worldwide environmental degradation?

3.3.1 The role of criminalisation

Thoughtless degradation of nature is unethical and widely seen as an affront to humanity, nature and, in some circumstances, god.\textsuperscript{398}

The general goal of criminalisation is to prevent certain kinds of behaviours or events from happening.\textsuperscript{399} To mark a specific conduct as a crime can most certainly help reduce this conduct from happening. Criminalisation gives an act a certain level of respect, it sharpens public awareness for this matter and helps develop a moral duty to avoid the criminalised act. The appellation alone creates a mental hurdle for potential perpetrators. The inner decision to perform a criminal activity is more difficult than that taken to commit an offence or a non-punishable act. Threatened punishments brings along a “deterrence-effect”. The application of internationally valid criminal regulations to individuals often increases the efficiency and the deterrence-effect of the given provision.\textsuperscript{400} Environmental matters are often dealt with on a civil or administrative basis which, when compared to a criminal approach, is softer and lacks the necessary stigmatisation and deterrence.\textsuperscript{401} On the other hand many states criminalise environmental harms in their national legal codes,

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\textsuperscript{398} Gray, above n 160, at 216.
\textsuperscript{399} Rob White \textit{Transnational environmental crime: Toward and eco-global criminology} (Taylor and Francis, Cullompton, 2011) at 5.
\textsuperscript{400} David Jensen and Silja Halle \textit{Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law} (UNEP, Nairobi, 2009) at 47.
\textsuperscript{401} Megret, above n 374, at 12.
and this can be seen as one step forward to international criminalisation. National environmental protection through criminal law can also help prevent environmental crimes from spreading across state borders. The courts have an important role in interpreting criminal provisions regarding the environment to determine punishable and non-punishable behaviour.

3.3.2 Criminalisation versus legalisation
Governments often treat environmental crimes as low-priority matters, which leads to a weaker response through criminal justice tools.\textsuperscript{402} High on the government priority list is the worldwide market for illegal drugs. The value involved in the drug trafficking business makes it the largest crime in the world.\textsuperscript{403} Strict regulation has lead to a “war on drugs”, especially executed from the USA. The massive expenditure of about USD 51 billion has proved to be slightly ineffective.\textsuperscript{404} Despite some major drug busts the war is still ongoing and turns more or less in circles. In the last years there is a trend of legalisation. Uruguay, for example, has legalised marijuana and even states in the USA have legalised weaker drugs.\textsuperscript{405} This renunciation of criminalisation of certain types of drugs is considered to be a huge success, so far.\textsuperscript{406} But this development of legalisation is not an option for environmental crimes. The legalisation process involved a lengthy period of education of the public and scientific research. Furthermore, the damage caused by light drugs is at first only a personal damage and secondly not as dangerous and complex as environmental harm.

Therefore environmental crimes should be better prioritised on the ladder of crimes and legalisation is not an option, but stricter regulation is. Self-regulation of companies or states for better environmental management in general, as is used for some environmental issues is also not an ideal form of control over international environmental crimes. It simply leaves too much leeway and lacks national and international alignment.

\textsuperscript{402} Davies, above n 95, at 44.
\textsuperscript{403} Nelleman and others, above n 3, at 7.
3.3.3 Sanction methods for international environmental crimes

When speaking of criminalisation it is crucial to turn to sanction methods as well. Penalties by law shall enable compensation for the damage caused, provide retribution for the violation of the legal rules and offer protection for third parties or society at large.\textsuperscript{407}

The most common instruments for punishment in general are fines, restoration and imprisonment.\textsuperscript{408} Fines and compensation for the commission of an international environmental crime are especially important to help renew the damaged ecosystem. This approach follows the recognised “polluter pays” principle in international environmental law.\textsuperscript{409} Imprisonment of individuals should only be imposed for the committing of serious crimes and therefore be the ultimate threat.\textsuperscript{410} Imprisonment is arguably the most serious personal punishment, but does not provide any redemption for the environment. It can also be an option, if the perpetrator cannot pay for the compensation or if fines are passed on to customers or shareholders.\textsuperscript{411} The effectiveness of softer options such as warnings, ban from a profession or settlements depends on the existence and on the application of incarceration as the ultimate penalty.\textsuperscript{412} A perpetrator takes a warning more seriously with the threat of imprisonment than the “threat” of just another warning. The moral stigma of this ultimum remedium is an instrument to control governmental or corporate officials and groups or individuals.\textsuperscript{413}

Impunity can actually fuel the harmful conduct even more. Criminal “masterminds” often remain untouched, because of the internationality of the cases and the fact that it is almost impossible to get them through international jurisdiction. In the context of human rights a “culture of impunity” is a strong reason for the permanent renewal of human rights violations throughout the

\textsuperscript{408} At 183.
\textsuperscript{409} Birnie and Boyle, above n 237, at 268.
\textsuperscript{410} Billiet and Rousseau, above n 406, at 191.
\textsuperscript{411} At 184, 185.
\textsuperscript{412} At 197.
\textsuperscript{413} At 185.
world.\textsuperscript{414} According to the UNSC the prosecution and penalisation of the culprits is a tool that contributes to the prevention of human rights violations.\textsuperscript{415} This finding can also be an indication for positive results of extended criminalisation in environmental issues.

The environmental harm, however, cannot be remedied via classical means, such as reprisal, restitution or compensation.\textsuperscript{416} The principle of restitution in integrum is inapplicable and any compensation is mostly inadequate for irreparable environmental damage.\textsuperscript{417} But sanctions can stop harm in the first place and also provide some resources to curb the overall environmental harm.

### 3.3.4 Criminalisation as a solution

To fight international environmental crimes effectively, numerous areas have to come together. For the best enforcement result, deterrence, prevention and punishment are vital.\textsuperscript{418} Strengthening of legal enforcement in the environmental criminal sector, adequate human and financial capacity, raising public awareness, fighting corruption and poverty, environmental education, and supporting national legislation has to come with criminalisation. Criminalisation is thus only one piece of the big puzzle of environmental protection, but it can help to break the vicious circle and prevent future environmental harm from happening. Criminal law is not the holy grail of solutions, but deliberate usage of it could lead to huge improvements. To finish a puzzle, it is vital to put all the pieces in place. Therefore criminalisation of environmental harm is inevitable for this process.

\textsuperscript{414} Cherif Bassiouni “The philosophy and policy in international criminal justice” in Lal C Vorah and others (ed) \textit{Man’s inhumanity to men: Essays in international law in honour of Antonio Cassese} (Martinus Nijhoff Publishers, Leiden, 2003) 65 at 119, 120.
\textsuperscript{416} Owada, above n 230.
\textsuperscript{417} Owada, above n 230.
\textsuperscript{418} Rymn J Parsons "The Fight to Save the Planet: U.S. Armed Forces, "Greenkeeping", and Enforcement of the Pertaining to Environmental Protection During Armed Conflict" (1998) 10(2) Georgetown International Environmental Law Review 441 at 480.
3.4 The definitional dilemma

Despite the fact that international environmental crimes are of such global importance, there is no universally agreed upon definition of the term.419 Several approaches and suggestions for a definition for the crimes in question exist, but they are highly debated, differ in wording and scope and are not in the least universally accepted. Admittedly it is very hard to find a solution in the light of the complexity of international environmental harm. This blocks an international response to the problem and contributes to the existing toothless fight against the issue.

3.4.1 The general importance of a definition

To create a legal regime involving national governments, MEAs, other international agreements and the UN it is necessary to set out a definition for international environmental crimes. A definition is the starting point of every legal activity to set out a clear frame for the matters in question. Nearly every international agreement begins with a section where specific important terms are defined, as seen for example in article 1(1) of UNCLOS or article 2 of the Basel Convention.420 National law works with definitions as well, either codified in a legal code or judicially developed.421 Given the fact that there is no international agreement on international environmental crimes, there is no such official definition in a written treaty or declaration.

Notably, in this effect is the Rome Statute, which presents the crimes within the jurisdiction of the court in article 5.422 In the following articles the Rome Statute defines the criminalised acts to prevent uncertainty concerning the jurisdictional scope of the ICC.423 However, the definition of “crimes of aggression” was omitted during the Rome Conference in 1998 due to the fact

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420 UNCLOS, above n 260, art 1(1); Basel Convention, above n 287, art 2.
421 cf. legal definition in § 202a II StGB.
423 Rome Statute, above n 421, art 6, 7, 8.
that the state parties could not agree upon a uniform definition.\textsuperscript{424} This left a colourless term, without much actual jurisdictional use and the crime of aggression was referred to as “crime in waiting”.\textsuperscript{425} In 2010 a definition was added during the Kampala Conference to overcome those obstacles, which is seen as a significant step forward for international criminal law.\textsuperscript{426} This underlines again the importance of a definition.

Another huge definitional obstacle with strong ties to the environment is the absence of definitions for the critical terms in article 8(2)(b)(iv) of the Rome Statute.\textsuperscript{427} The used words, such as “long-term” or “severe”, are lacking clear boundaries, whereas at the same time a conviction is only possible when the defendant acted knowingly.\textsuperscript{428} This lack of definition makes the prosecution of this environmental war crime highly complicated.\textsuperscript{429}

3.4.2 Key terms within the sphere of international environmental crimes

The lack of an universally agreed upon definition of international environmental crimes often leads to the fact that these crimes cannot assuredly be identified and uncertainties like this cause problems. Without being able to classify an act harming the environment as a crime, there is no way that environmental degradation through human activities can be tackled effectively with criminal law or law in general. To ensure effective legal countermeasures it is desirable to work with precise and specific terms. A definition provides this needed precision. This is the first hurdle a subject has to take to be legally approached.

\begin{itemize}
\item \textsuperscript{424} Anouk T Boas “The definition of the crime of aggression and its relevance for contemporary armed conflict” (1 June 2013) International Crimes Database <www.internationalcrimesdatabase.org>.
\item \textsuperscript{425} Rome Statute, above n 421, art 5(2); Matthias Schuster “The Rome Statute and the Crime of Aggression: A Gordian Knot in regard to this Solution” (2003) 14 Criminal Law Forum 1 at 17; Mohammed M Gomaa “The definition of the crime of aggression and the ICC jurisdiction over that crime” in Mauro Politi and Giuseppe Nesi (ed) The International Criminal Court and the crime of aggression (Ashgate, Trento, 2005) at 56.
\item \textsuperscript{426} Alexander G Willis “The Crime of aggression and the resort to force against entities in statu nascendi” (2012) 10(1) Journal of International Criminal Justice 83 at 83.
\item \textsuperscript{427} Article 8(2)(b)(iv) of the Rome Statute: “Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.”
\item \textsuperscript{428} Gilman, above n 378, at 469.
\item \textsuperscript{429} At 469.
\end{itemize}
However, a mix of different expressions with partly different connotations is currently found in the sphere of international environmental crimes.

Lynch and Stretesky demand the deepening of green criminology, Higgins pushes to eradicate ecocide, UNEP and INTERPOL urge to take on international environmental crimes, Berat promotes a right to a healthy environment and wants the recognition of geocide to ensure the right to a healthy environment and pave the way to environmental justice.\textsuperscript{430} This mixture of expressions describes the dilemma of international environmental crimes quite well. Instead of an exact determination of international environmental crimes, there is simply a global understanding that there are certain acts which could be seen as a crime, but without an internationally consistent opinion and in absence of a specific classification or stringent naming.\textsuperscript{431} The EIA does not even use a definition in its 2008 report, but describes the term via different case groups.\textsuperscript{432} Another issue in the definitional section regarding international environmental crimes is that the boundaries within the different types of crimes are often unclear, which contributes to the vagueness of the whole field.\textsuperscript{433} To approach this problem it is wise to first take a closer look on those aforementioned expressions.

Simply spoken, green criminology deals with every sort of crime harming the environment.\textsuperscript{434} Without having one specific definition, green criminology circles around the identification of the form of victimisation, harm, crime, morality, law and justice related to environmental damage.\textsuperscript{435} These matters are either local, national or global in scope and effect.\textsuperscript{436} Therefore green criminology can be used as an umbrella term for international environmental crimes combining all the different perspectives and influences. Green criminology explores the link between crimes against the environment and

\textsuperscript{430} Lynch and Stretesky, above n 10, at 19; Higgins, above n 8, at 71; Nelleman and others, above n 3, at 41; Berat, above n 2, at 328, 338.
\textsuperscript{431} Andrade, above n 29, at 160.
\textsuperscript{432} Case Groups: Illegal trade in wildlife, Illegal trade in ozone-depleting substances, Dumping and illegal transport of various kinds of hazardous wase, Illegal, unregulated and unreported fishing, Illegal logging and trade in timber; Banks and others, above n 9, at 1.
\textsuperscript{433} Nelleman and others, above n 3, at 41.
\textsuperscript{434} Lynch and Stretesky, above n 10, at 1.
\textsuperscript{435} At 6; Nurse, above n 223, at 4.
\textsuperscript{436} Rob White DzThe transnational context of local environmental harm” (2008) 23(2) New Zealand Sociology 119 at 119.
The expression “green collar crimes”, referring directly to the popular categories of “white” and “blue collar crimes”, generally describes crimes against the environment. The concept of environmental justice states that “no person or group should be exposed to environmental harm because of race, class, gender or other characteristics”.\textsuperscript{438} Besides bringing equality between all people, environmental justice also implies a certain amount of intergenerational equity as Edith Brown Weiss lays out.\textsuperscript{439} Environmental justice is hence what shall ideally be the outcome of protecting the environment through criminal law. Thus green criminology should ensure environmental justice with the help of the, admittedly very vague, right to a healthy environment as stated, for example, in principle 1 of the 1992 Rio Declaration on Environment and Development (Rio Declaration).\textsuperscript{440} Next to environmental justice stands ecological justice. This term refers to the link of humans and nature.\textsuperscript{441} In contrast to environmental justice ecological justice does not refer to the distribution of certain environments among humans, but to the general quality of the global environment.\textsuperscript{442}

All these aforementioned terms play a role in the big game of international environmental crimes, but the keywords here are most certainly “ecocide” and “international environmental crime”.

3.4.3 Ecocide

The catchphrases “ecocide” and “geocide” need a deeper look. Both terms are often found in green criminology, both aggravating a certain understanding. This subchapter points out their noteworthiness. These terms should be reserved for the most heinous crimes against the environment. Ecocide is actually interchangeable with the term geocide.\textsuperscript{443} Both illustrate the environmental counterpart of genocide. Ecocide was introduced by the Swedish authorities to

\textsuperscript{437} Nurse, above n 223, at 4.
\textsuperscript{438} Lynch and Stretesky, above n 10, at 14.
\textsuperscript{440} Rio Declaration on Environment and Development 31 ILM 874 (1992) principle 1.
\textsuperscript{442} White, above n 440.
\textsuperscript{443} Drumbl, above n 199, at 142; This thesis will henceforth work with the term ecocide.
describe the tactical use of environmental damage of the USA via the defoliation of forests to rob cover for guerilla troops during the Vietnam War. Shortly spoken, it describes the “killing of the Earth”. Higgins speaks of the antithesis of life and defines ecocide as:

.Extensive destruction, damage or loss of ecosystems of a given territory, whether by human agency or other causes, to such extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished.

Berat similarly defines geocide by adding clarifying examples:

.Intentional destruction, in whole or in part, of any of portion of the global ecosystem, via killing members of a species; causing serious bodily or mental harm to members of the species; inflicting on the species conditions of life that bring about its physical destruction in whole or in part; and imposing measures that prevent births within the group or lead to birth defects.

When talking about ecocide, it has to be distinguished between anthropogenic ecocide on the one hand and natural ecocide on the other hand. Natural ecocide covers force majeure respectively an act of god and would logically not be subject to criminal investigation. Anthropogenic ecocide is potentially open to criminal jurisdiction to a certain extent. Incidentally the 2015 Bento Rodriguez dam disaster, which is deemed to be the worst environmental catastrophe in Brazil’s history, can be named as an example. As a result of the incident in the heart of an environmentally vulnerable area of the Amazon, 19 people were killed, many livelihoods were destroyed and the river system

Drumbl, above n 199, at 142.
Higgins, above n 8, at 62, 63
Berat, above n 2, at 343.
Higgins, above n 8, at 62.
At 62.
around the River Doce was massively polluted.\textsuperscript{450} This event contains all elements of Higgins’ ecocide definition. The pollution of the flooded area entails extensive damage to a given territory, it was caused through negligent human agency and a peaceful enjoyment of the residents is noticeable affected.\textsuperscript{451} An ecocide provision is aiming to hold the persons in charge accountable for their actions, especially Chief Executive Officers (CEOs) of globally operating corporations. This shall stop today’s usual bail-out policy. The ultimate level of responsibility lies with the individual and should not get lost in the abstract form of a corporate structure.\textsuperscript{452}

The logic behind the recognition of an international crime of ecocide appears quite simple: any serious damage of the natural environment done by humans constitutes a breach of duty of care and this breach consists in tortious conduct, when attempted with intention, recklessness or negligence.\textsuperscript{453} The acknowledgement of an international environmental crime would criminalise unlawful damage to a given environment ensuring personal responsibility is attached to in regards to intended, reckless or negligent environmental harm.\textsuperscript{454}

3.4.4 International environmental crimes

There are currently a number of definitions used for international environmental crimes. Those existing interpretations of international environmental crimes are neither universally agreed upon, nor recognised for international use. For various reasons the study for an adequate definition of international environmental crimes has proven to be incredibly difficult and with many variants.

First of all, environmental crimes vary greatly and can range from wrongful disposal of common hazardous household products to killing endangered species. Secondly, harm and causation is often hard to identify, because of the diversity of the acts, the deferred occurrence of environmental consequences, the range from local to global and partly even scientific proof of

\textsuperscript{451} Phillips, above n 449.
\textsuperscript{452} Higgins, above n 8, at 106.
\textsuperscript{453} Drumbl, above n 199, at 143.
\textsuperscript{454} Higgins, above n 8, at 64, 68.
the consequences is lacking.\textsuperscript{455} There is also the fact, that environmental crime is quite a young development in international law.

3.4.4.1 Different definitions in use

The influential Organisation for Economic Cooperation and Development (OECD) describes international environmental crimes together with Hayman and Brack as “deliberate evasion of environmental laws and regulations by individuals and companies in the pursuit of personal financial benefit, where the impacts are transboundary or global”.\textsuperscript{456} Situ and Emmons see environmental crime as an “unauthorized act or omission that violates the law and is therefore subject to criminal prosecution and criminal sanctions”.\textsuperscript{457} Castillo sees environmental crimes as “violations or breaches of national environmental laws and regulations that a state determines to be subject to criminal penalties under its national laws and regulations”.\textsuperscript{458} In their report UNEP and INTERPOL classify international environmental crimes as:\textsuperscript{459}

... collective term, which comprises illegal activities harming the environment and aimed at benefitting individuals, groups or companies from the exploitation, damage, trade or theft of natural resources, including serious crimes and transnational organised crimes.

Clifford and Edwards see them as an “act committed with the intent to harm or with a potential to cause harm to ecological and/or biological systems and for the purpose of securing business or personal advantage”.\textsuperscript{460}

The above-mentioned definitions show once more that there still is no continuous similarity in defining this term. There are two contrasting rudiments to the definitional problem. Environmental crimes are described on the one hand as “acts violating any environmental protection statute or environmental

\textsuperscript{456} OECD, above n 2, at 14; Hayman and Brack, above n 9, at 4.
\textsuperscript{457} Situ and Emmons, above n 53, at 3.
\textsuperscript{458} Fajardo del Castillo, above n 190, at 7.
\textsuperscript{459} Nellemann and others, above n 3, at 7.
\textsuperscript{460} Mary Clifford and Terry D Edwards Environmental Crime (2nd ed, Jones & Barlett Learning, Burlington, USA, 2011) at 113.
law in general”, whereby on the other hand they encompass “all acts with the intend to harm or with a potential to harm the environment”. Therefore these definitions can broadly be split in two categories. Those aiming to criminalise environmental harm directly to a certain extend and those relying on the circumvention of environmental regulations in place.

Following the second notion any act or omission violating legal regulations gives way to criminal prosecution and criminal sanctions. This strict legalistic approach does not see human behaviour harming the environment as a crime, as long as the act does not violate a written law. Thereby the scope and the intensity of the harm do not matter. This means environmental crimes focus solely on legally protected environmental resources. Acts or omissions deemed to be environmentally irresponsible, negligent or destructive would not be included and it is likely that many of the acts in question are not deemed as illegal.\textsuperscript{461} In fact, humans often lack the scientific knowledge of the coherences of the environment to apply suitable protective laws. This concept is based on the principle “nulla poena sine lege”, which means “no law to break, no criminal offence”.\textsuperscript{462} This principle is also implemented in international criminal law, as it is included in article 22 to 24 of the Rome Statute.\textsuperscript{463} Following that the creation of environmental law itself defines through its existence environmental crimes. On the other hand there is a large number of proponents of a more socio-legal approach. Here the definition derives more from a moral and value based concept, which prioritises environmental harm. It does not simply follow what the law dictates.

3.4.4.2 Anthropocentric, biocentric and ecocentric approaches

The term “harm”, however, is not used equally around international environmental crimes.\textsuperscript{464} White points out the anthropocentric, biocentric and ecocentric approaches.\textsuperscript{465} Anthropocentrism separates humans from the general world’s ecosystem and sees the human race as superior over all living and non-

\textsuperscript{461} Situ and Emmons, above n 53, at 3.
\textsuperscript{462} At 3.
\textsuperscript{463} Rome Statute, above n 421, art 22, 24.
\textsuperscript{464} Barclay and Bartel, above n 454, at 189.
\textsuperscript{465} White “Environmental crime in global context: exploring the theoretical and empirical complexities”, above n 440.
living things (human-centred).\textsuperscript{466} Everything that is “non-human” is instrumentalised to serve humans.\textsuperscript{467} Economic or profit interests always go first and environmental protection is only done for the sake of resource management. Criminalisation of environmental harm serves therefore solely for the protection of humans and environmental protection is only secondary.\textsuperscript{468} In contrast to this human centred approach biocentrism centres the environment itself (species-centred).\textsuperscript{469} It promotes equality between humans and non-human species, meaning that human beings have the exact same moral worth as other species.\textsuperscript{470} Decisions based on this attempt should be made according to which outcomes are most likely to foster the widest possible human and non-human diversity of life.\textsuperscript{471} The third approach in this row is called ecocentrism. Following the concept of ecocentrism, humans are a part of complex ecosystems that should be preserved for their own sake via the notion of rights and the environment (socio-ecological centred).\textsuperscript{472} The interconnectedness of all life on Earth is central to this approach. That implies that humans have the power to conduct acts with global consequences and therefore they have a responsibility not to exceed the limits of the planet’s ecosystems.

Whether the anthropocentric, biocentric or ecocentric theory is followed the direction of the socio-legal approach stays the same. Environmental harm in any way contains criminal energy. Nevertheless, the distinction is important, because the theories depict the role of humans and predetermine an approach to the issue. All these approaches generate different views on the handling of international environmental crimes. Due to these various angles, a definition of international environmental crime is definitely controversial as well as ambiguous.\textsuperscript{473} History shows that not only the anthropocentric view has been applied in international conventions and treaties, as for example seen in the

\textsuperscript{466}White "Environmental crime in global context: exploring the theoretical and empirical complexities", above n 440.
\textsuperscript{467} At 440.
\textsuperscript{469} At 18.
\textsuperscript{470} White "Environmental crime in global context: exploring the theoretical and empirical complexities", above n 440.
\textsuperscript{471} At 440.
\textsuperscript{472} At 440.
\textsuperscript{473} White Transnational environmental crime: Toward and eco-global criminology, above n 398, at 1.
1972 World Heritage Convention or the Convention on Biological Diversity (CBD). These agreements serve humans, but not exclusively.\footnote{Birnie and Boyle, above n 237, at 257.}

The vast majority of existing definitions require the strict violation of existing international environmental regulation, as outlined by the definition of Situ and Emmons or Castillo.\footnote{At 257.} Hayman and Brack use the same approach, but they extend it with the premise that the perpetrator needs to pursue a financial benefit of some sort. But as explained above this linkage to financial ties does not seem especially helpful in order for a strong development for environmental protection. The definition acquired by Clifford and Edwards, which describes international environmental crimes as “act committed with the intent to harm or with a potential to cause harm to ecological and/or biological systems and for the purpose of securing business or personal advantage”,\footnote{Situ and Emmons, above n 53, at 3; Fajardo del Castillo, above n 190, at 7.} refers to environmental harm as starting point. But it also links international environmental crimes strictly to financial benefits, which again ignores the fact that environmental harm can also occur without a direct financial pursuit. UNEP and INTERPOL deliver an interesting description. They speak of a “collective term”, which is accurate, because of the many different directions international environmental crimes can take. Their approach, however, also implies a benefitting to individuals, companies or groups, but that does not have to be a financial one, which differs this approach from the above-said definitions.

3.4.5 The relationship between ecocide and international environmental crimes

The question remains, what relationship exists between ecocide and international environmental crimes. Is ecocide the same as international environmental crimes in general or is it an own cohere legal term? The basis of ecocide and international environmental crimes is ecological damage.\footnote{Clifford and Edwards, above n 495, at 113.} Nevertheless, both terms are describing something different. Ecocide is reserved for the most serious international crimes harming the environment, whereby

\footnote{Gray, above n 160, at 217.}
international environmental crimes have a wider scope and describe the whole area of international environmental crimes encompassing, for example, smaller scaled environmental crimes as well. Ecocide embraces acts with vast global and disruptive effects whereby international environmental crimes also refer to acts with less destructive regional impacts. In a pyramid representing the significance of environmental crimes there would be national environmental crimes at the bottom, general international environmental crimes in the middle and ecocide would be the tip of the figure. After having a closer look on both definitions the difference with ecocide is clarified. Higgins speaks in comparison to, for example, Clifford and Edwards of extensive destruction and damage.479 This distinction can be primarily seen in the proximity of the term ecocide to the term genocide, which is recognised as the most serious international crime possible. The power of simply calling something genocide can be observed in the political tensions between the German and Turkish government, after the German parliament addressed the massacre on the Armenian people during the first world war as genocide.480 The same political explosiveness lies in the term ecocide. This brisance of the word underlines the exclusiveness of ecocide compared to an “ordinary” international environmental crime. Nevertheless, ecocide is still included under the overall term of international environmental crimes. Ecocide just represents the upper end of the full range of the crimes in question.

3.5 Potential forum for international environmental crimes
Chapter One has outlined the complexity of international environmental harm. Chapter Two has revealed that most of the action against these harms is left to the national states. However, this suppression to national authorities cannot be a comprehensive and sustainable solution. Even the CITES Secretariat itself states that some states are overwhelmed by that challenge of implementing regulations regarding wildlife crimes.481 This challenge for some states can be transferred to the other areas of international environmental crimes. To

479 Higgins, above n 8, at 62, 63; Clifford and Edwards, above n 495, at 113.
481 CITES Secretary, above n 270.
untangle the complexity of international environmental crimes a powerful legal institution on international level is needed.

On international level, numerous dispute solving entities exist. Despite the fact that the number of potential forums for all international environmental disputes is constantly increasing, a specific forum dealing with environmental crimes is not yet in existence. Potential international forums are, for example, the International Court of Justice, the European Court of Justice, the WTO dispute settlement body, the Permanent Court of Arbitration, the World Bank panels, the International Centre for Settlement of Investment Disputes (ICSID) or the International Tribunal on the Law of the Seas. All these institutions are equipped with different backgrounds and follow divergent goals, as, for example, the economic focus of the influential International Centre for Settlement of Investment Disputes (ICSID) or the WTO dispute settlement bodies show. In addition to these fora, numerous non-compliance systems have been implemented alongside several MEAs, such as the Montreal Protocol, CITES or the Climate Change Regime, which provide further legal oversight. The most famous and far reaching entities providing international jurisdiction are currently the ICJ and the ICC. Both institutions are seen as milestones in international law. The suitability to handle international environmental crimes of these fora will be examined in the course of the next parts of this chapter. However, this jungle of potential fora leads to competence and jurisdictional clashes of the fora, which is not expedient for an effective international environmental oversight regime. It leads to a risk of duplication and derogates from a coordinated approach. States are given the chance to do forum shopping, which again is not expedient.

The currently existing “big” international courts, the ICJ and the ICC, cannot offer a harmonised solution so far. A group of international experienced

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482 Duncan Brack “International Environmental Disputes” (2001) The Royal Institute of International Affairs at 3.
483 At 3-12.
484 At 3-12.
486 Brack, above n 481, at 3.
487 At 3.
lawyers founded the International Court of Environmental Arbitration and Conciliation (ICEAC) in 1994 in Mexico.\textsuperscript{488} However, the ICEAC has not had much of an impact. Its few decisions mostly related to domestic questions and were solely consultative opinions.\textsuperscript{489} Not a single state has accepted a petition for conciliation so far.\textsuperscript{490} Nevertheless, the ICEAC could be a forerunner for a new institution with a comprehensive approach on legal handling of the global environment, including international environmental crimes.

Regarding the environment a number of new international bodies are conceivable. A WEO, an International Court for the Environment or an Environmental Security Council are among the most popular ones.\textsuperscript{491} Even an International Environmental Crime Convention with its own judicial body is imaginable. A Convention like this could directly criminalise certain behaviour and offer international jurisdiction, but would create its own treaty regime, which would add to the “exploding” number of international fora. Nevertheless, the development of these bodies could elevate the environment from being a peripheral cross-sectoral problem to one of the core priorities within international law.\textsuperscript{492} Especially an International Court for the Environment or the WEO are of interest as future institutions to combat the problem of international environmental crimes on international level comprehensively. The currently existing jurisdictional entities, mainly the ICJ and the ICC could also take over the task of handling international environmental crimes. At this stage it is noteworthy that the current institutions do not have jurisdiction for international environmental crimes at the moment. A new environmental policy or an environmental amendment could provide a remedy for this problem. Higgins and others promote the extension of the Rome Statute to allow the ICC jurisdiction over acts considered as ecocide.\textsuperscript{493} The borrowing of the four “ICC-crimes” in the scope of the Rome Statute shall pave the way for ecocide to be listed as the fifth crime in article 5(1) of the Rome Statute. However, the existing

\textsuperscript{488} Ole W Pedersen "An International Environmental Court and International Legalism" (2012) 24(3) Journal of Environmental Law 547 at 552.
\textsuperscript{489} At 552.
\textsuperscript{490} At 552.
\textsuperscript{491} Bosselmann, above n 145, at 257; Soroos, above n 48, at 44.
\textsuperscript{492} Soroos, above n 48, at 44.
\textsuperscript{493} Higgins, above n 8, at 70; United Nations Economic and Social Council "Draft Declaration of Principles on Human Rights and the Environment", above n 322.
institutions also suffer from several limitations, such as overlapping jurisdiction or only standing for states, which contributes to fragmentation and the fact that pronouncements are often only of modest significance. Nevertheless, they can be seen as a future option for handling international environmental crimes.

Numerous experts come to the conclusion that more collaboration and more regulation is needed to handle international environmental crimes. States have called for a “war on drugs”, so a “war on environmental degradation” might be an idea to think through. Whereby the term “war” should only hold a symbolic meaning. Criminal law plays an important part in national law when it comes to all sorts of regulation and should therefore be more promoted for international use. The aforementioned possible solutions for the problem of international environmental crimes on international level show that there is no shortage of options. There is, however, an extreme shortage of political will and financial resources available for this project.

3.6 Conclusion
This chapter has shown that more international cooperation is needed and international criminalisation could be an option to condemn environmental degradation through international environmental crimes. The global problem arising from international environmental crimes has to be addressed internationally in some way. In order to take on the situation appropriately the international community needs to agree upon a definition of international environmental crimes and a suitable forum to adjudicate possible criminal acts falling under this definition. Chapter Two revealed that the current landscape of international law does not offer a suitable forum, but this chapter has shown that there are some options and ideas to change this fact and adjudicate international environmental crimes on international level in the future. This thesis will hereafter focus on the existing institutions ICJ and the ICC and the potential new fora ICE and WEO as future fora for international environmental crimes. These four potential candidates are the most promising ones and the ones offering the most comprehensive approaches.

494 Riches and Bruce, above n 259, at 7.
495 Coppens, above n 101, at 114; Freeland, above n 14, at 121.
496 Hayman and Brack, above n 9, at 21.
The question in the following chapters is, whether the ICJ, the ICC, the ICE, or the WEO are a suitable legal forum for international environmental crimes?
Chapter Four

The International Court of Justice

Does the International Court of Justice offer a solution for international environmental crimes?

4.1 Introduction
The ICJ, as successor of the Permanent Court of International Justice (PCIJ), is the most respected and oldest jurisdictional organ in international law. It is often referred to as a “world court”.497 Because of its centrality in international law, this institution cannot be left out in the cold in a discussion for the most suitable forum for important international matters. Since its foundation in 1945 the ICJ has made numerous rulings that have guided and enhanced international law and, as the principal judicial organ of the UN, it clearly takes up a pivotal role in international law in general.498 Article 36(1) of the ICJ-Statute states that the ICJ has jurisdiction over cases which the “parties refer to it and all matters specially provided for in the Charter of the United Nations or in treaties and conventions in force”. 499 This jurisdiction could include international environmental matters. But it is highly debateable whether the ICJ has jurisdiction over matters of international environmental criminal law.

4.2 The International Court of Justice’s obligation to the environment
It took some time for the ICJ to discover its obligation to the global environment. That was due to the fact that international environmental law was not a major concern until this area of law got a “major boost” through the developments in the 1970s.

497 International Court of Justice “Jurisdiction” International Court of Justice <www.icj-cij.org>.
498 Riches and Bruce, above n 259, at 2; Owada, above n 230.
499 Statute of the International Court of Justice, above n 250, art 36(1).
Vinuales has described two stages of international environmental law developments before the ICJ. The early stage includes cases such as the remarkable Corfu Channel Case in 1949 and the Nuclear Test Case in 1974. The eventual second wave was heralded by of the Gabcikovo-Nagymaros Case, which is widely considered to be the first ICJ case with environmental matters as a core aspect. These developments led to the creation of an ICJ chamber for environmental matters in July 1993; this was done under the authority of article 26(2) of the Statute of the ICJ. The purpose of this chamber was to deal with any environmental case referred to the court. However, no such cases were ever referred and the chamber was therefore closed in 2006.

Nevertheless, the ICJ has often emphasized that the environment is of great importance for the well being of humans, future generations and the planet in general. In recent years more and more ICJ cases arise containing at least an environmental element. However, the often-cited Gabcikovo-Nagymaros Case was not an environmental case; despite the fact the Gabcikovo-Nagymaros project clearly triggered environmental damage in diverting the Danube River. This environmental element was only a peripheral element of the case as such. Rather, the case primarily dealt with international treaty obligations. This demonstrates that it is quite difficult to distinguish between cases related to the environment and cases related to other international law regimes. Even the older examples of “environmental” cases, such as the Pacific Fur Seal Arbitration in 1893 or the Lac Lanoux Case in 1957 primarily dealt with

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501 At 235.
502 Owada, above n 230; Vinuales, above n 499, at 236.
507 The Pulp Mills Case and the Aerial Herbicide Case triggered environmental attention, which is in Vinuales point of view even a third wave in the environmental legal development of the ICJ (Vinuales, above n 499, at 234-236); Owada, above n 230.
economic interests and the ecological interests were only attachments.\textsuperscript{508} States are not likely to agree that a conflict is purely environmental in nature.\textsuperscript{509}

This might in fact be, inter alia, a reason that not a single case was handled in front of the environmental chamber of the ICJ. The application of the international environmental law regime inside the ICJ is primarily to monitor a state’s obligation of activities within its territory and to ensure compliance with international environmental regulations.\textsuperscript{510} This mostly occurs in the course of cases related to other international law regimes.\textsuperscript{511} On the other hand, this shows that the ICJ is able and available to handle environmental cases and that such issues may be appropriately addressed by an established and respected international court.

4.3 \textbf{Dual jurisdiction of the International Court of Justice}

4.3.1 \textbf{Jurisdiction in contentious cases}

The ICJ decides, in accordance with international law, legal disputes submitted by the members of the United Nations.\textsuperscript{512} Through its jurisdiction the court can shape new developments, as, for example, the implementation of environmental rights as human rights.\textsuperscript{513}

Similarly, the European Court of Justice (ECJ) has used its jurisdictional powers to influence European environmental law.\textsuperscript{514} In 1985 the ECJ recognised environmental protection as “essential objective” and has occasionally given these environmental objectives equal or greater weight than economic or trade objectives.\textsuperscript{515} This success of the ECJ’s jurisdiction is logically based on the close structure of the EU in general, which is unique.\textsuperscript{516}

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\textsuperscript{509} At 4.

\textsuperscript{510} Vinuales, above n 499, at 257.

\textsuperscript{511} At 257.

\textsuperscript{512} Jurisdiction in contentious cases; International Court of Justice “Jurisdiction”, above n 496.

\textsuperscript{513} Vinuales, above n 499, at 257.

\textsuperscript{514} Brack, above n 481, at 3.


\textsuperscript{516} Brack, above n 481, at 3.
ICJ decisions carry significant weight and influence in international law.\textsuperscript{517} They have a powerful moral and political impact.\textsuperscript{518} The ICJ is furthermore one of the most powerful tools where international environmental conventions such as the ICRW or CITES fail to present adequate legal sanctions.\textsuperscript{519} In this way, ICJ judgments can compensate for the lack of legal measures in the aforementioned agreements.\textsuperscript{520} This can be observed in the ICJ’s \textit{Whaling in Antarctica Case}: the pressure it has placed on Japan to conform with the judgement has been significant and Japan stopped its whaling programme, known as JARPA II.\textsuperscript{521} Despite the fact, that Japan set out a revised whaling programme, which did not get the endorsement of the scientific committee, the ICJ ruling can be regarded as a success, because the whaling rules were imposed on Japan.

The primary jurisdiction in contentious cases does not appear to be a main tool in handling international environmental crimes.

4.3.2 \textbf{Advisory jurisdiction}

The ICJ also has the power to issue advisory opinions.\textsuperscript{522} Advisory opinions are more general and aim of governing future matters in international law. This form of jurisdiction allows for a wider range of possible participants: in addition to UN member states, article 96(a),(b) of the UN Charter opens this process to other UN organisations and organs.\textsuperscript{523}

Advisory opinions, in contrast to the jurisdiction in contentious cases, could be a mechanism for developing stricter rules for international environmental crimes. Pursuant to article 65(1) of the ICJ-Statute, the court can proffer its opinion on any legal question.\textsuperscript{524} Thus, the ICJ has the power to issue advisory opinions on issues of international environmental criminal law. The most notable advisory opinion issued by the ICJ is the conclusion given on the

\begin{flushleft}
\textsuperscript{517} At 3. \\
\textsuperscript{518} At 3. \\
\textsuperscript{519} Arash Pourhashemi, S Zarei and Mansour Pournouri “A Deliberation on recent legal cases and judgements of the International Court of Justice on Environmental Disputes” (2015) 12 International Journal of Environmental Science and Technology 3391 at 3398. \\
\textsuperscript{520} At 3398. \\
\textsuperscript{521} \textit{Whaling in the Antarctic} (Australia v Japan: New Zealand intervening) [2014] ICJ Report 2014. \\
\textsuperscript{522} Advisory jurisdiction; International Court of Justice “Jurisdiction”, above n 496. \\
\textsuperscript{523} Charter of the United Nations, art 96. \\
\textsuperscript{524} Statute of the International Court of Justice, above n 250, art 65 (1).
\end{flushleft}
question of legality of the use of nuclear weapons in 1996, which assessed the
legitimacy of the use of nuclear weapons in armed conflict.\textsuperscript{525} This advisory
opinion is seen as an authoritative benchmark with strong repercussions in
human rights law and law of armed conflict.\textsuperscript{526} This instrument of international
law is not used frequently enough, especially not in environmental matters. The
system of “checks and balances”, which is basic to every democracy and only
exists in a “light” version on the international level, could get a small “boost” if
the ICJ was given the opportunity to offer more legal opinions. Therefore, the
advisory jurisdiction of the ICJ could play a role in further developing
international environmental criminal law.

4.4 Limitations of the International Court of Justice

The ICJ has to deal with limitations.\textsuperscript{527} In theory the ICJ has jurisdiction over all
environmental disputes, which is outlined in article 36(1) and (2) of the ICJ-
Statute.\textsuperscript{528} This is, however, widely limited through the fact that the disputes
have to be submitted by states and both submitters have to agree to jurisdiction
of the ICJ. There is no standing before the ICJ for corporations, groups,
individuals or a representative of nature, which are considered main actors in
international environmental law and international criminal matters.\textsuperscript{529} Clearly,
this system does not provide sufficient access to international justice for non-
state actors.\textsuperscript{530} It furthermore blocks hearing all perspectives of the often very
technical scientific evidence common to cases related to the environment.\textsuperscript{531}

Even if states agree to the ICJ’s jurisdiction, compliance with the verdict is
not automatic and subject to domestic and international politics. This can be
seen in the aforementioned \textit{Whaling in Antarctica Case}, where Japan quickly
issued a revised whaling programme, which is opposed by the scientific

\textsuperscript{525} \textit{Legality of the Threat or Use of Nuclear Weapons} (Advisory opinion) [1996] ICJ Rep 66;
Vinuales, above n 499, at 233.
\textsuperscript{526} Dale Stephens “Human Rights and Armed Conflict - The Advisory Opinion of the International
Court of Justice in the Nuclear Weapons Case” (2001) 4 Yale Human Rights & Development Law
Journal 1 at 2.
\textsuperscript{527} Riches and Bruce, above n 259, at 2.
\textsuperscript{528} Statute of the International Court of Justice, above n 250, art 36; Charter of the United
Nations, art 93.
\textsuperscript{529} Giagnocavo and Goldstein, above n 391, at 347.
\textsuperscript{530} ICE Coalition, above n 366, at 4.
\textsuperscript{531} At 4.
committee. Japan’s final reaction remains to be seen. Furthermore, there is no special expertise of ICJ judges in cases relating closely to the environment and criminal law.\textsuperscript{532}

4.4.1 **Criminal charges in front of the International Court of Justice**

As a general principle, criminal charges may not be tried before the ICJ and are intended to be handled by the “little brother” of the ICJ, the ICC.

International criminal law deals with charges against individual natural persons and not with charges against states or other organisations: actual criminal conduct is ultimately performed by individuals and not by abstract entities.\textsuperscript{533}

Unlike the ICC, the ICJ has no standing to prosecute individuals. International criminal law is directed to human responsibility and not to state responsibility, a principle set out in article 25(4) of the Rome Statute of the ICC.\textsuperscript{534} Under this scheme, a criminal offence is only attributable to a person, even if the person acted in his role as an agent of a state or its government.\textsuperscript{535}

4.5 **Conclusion**

In total, this need for individualisation in front of a criminal court puts the ICJ out of the picture, because article 34(1) of the Statute of the International Court of Justice limits the parties in front of the judges to states.\textsuperscript{536} This and the other aforementioned limitations demonstrate that the ICJ would not be the preferred institution to accelerate the handling of international environmental crimes. Its role is more that of a guardian institution for general international law.\textsuperscript{537}

Nevertheless, the ICJ can assist through its verdicts or advisory opinions with the development, clarification and advancement of international environmental law, which then can in turn influence the development of environmental criminal law in other fora.

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\textsuperscript{532}Riches and Bruce, above n 259, at 2.
\textsuperscript{533}Gerhard Werle \textit{Voelkerstrafrecht} (3rd ed, Mohr Siebeck, Tuebingen, Germany, 2012) at 108.
\textsuperscript{534}At 119.
\textsuperscript{535}At 119.
\textsuperscript{536}Statute of the International Court of Justice, above n 250, art 34(1).
\textsuperscript{537}Vinuales, above n 499, at 285.
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Chapter Five

Reformed International Criminal Court

Could the International Criminal Court offer a solution for the problem of international environmental crimes after an environmental reformation?

5.1 Introduction

When it comes to international criminal law, the ICC is now established as the central world body. The ICC was designed to prosecute the most heinous crimes committed by humans and to be the solution for individual impunity in international law.\textsuperscript{538} The ICC now has a decade and a half of experience in dealing with international crimes.

As an international criminal court, it remains an open question, to what extent the ICC can currently adjudicate international environmental crimes. The primary goal of the ICC is to punish commission of one of the four ICC crimes: the crime of genocide, crimes against humanity, war crime, and the crime of aggression. In the current incarnation of the ICC, if they were to be prosecuted, international environmental crimes would somehow need to be subsumed into one of these four core crimes.\textsuperscript{539} This chapter examines the current influence of the ICC on international environmental crimes and the possibility of an environmental reformation of the ICC.

5.1.1 The current role of the Rome Statute

The Rome Statute is the most significant document when viewing international law from a criminological perspective. It penalises what is seen as the most horrible acts on Earth: genocide, crimes against humanity, war crimes and the

\textsuperscript{538} McCallion and Sharma, above n 249, at 358.

\textsuperscript{539} Drumbl, above n 199, at 145.
crime of aggression. The cruelties during the 20th century, including World War I and World War II, led to the emerging support for the creation of the ICC at the conference in Rome in 1998. The ICC is seen as a historic landmark in international criminology. With the foundation of the ICC, the hope for more constructive international cooperation in criminal matters climbed to a new level. Prior to the adoption of the Statute on 17 July 1998 there was an urgent call for an institution like this in order to facilitate the prosecution of environmental crimes. Despite this need and concern, the negotiators of the Rome Statute mainly neglected the environment in their negotiations and it remains questionable whether any broad form of environmental crime can be subsumed under the Rome Statute’s provisions. Is it possible that a massive environmental catastrophe would be required to motivate the creation of a system that would allow for international environmental criminal prosecution?

5.1.1.1 The preamble of the Rome Statute

The preamble of the Rome Statute sets out the purpose of the ICC: to prevent the most serious crimes of international concern in the future and to end the impunity for perpetrators. That means that the ICC should provide deterrence and punishment of the most serious acts threatening international peace and security. Environmental destruction via international environmental crimes definitely contributes to the destabilisation of world’s peace and security and most certainly to the non-well-being of the world. This phrasing can be found in paragraph 3 of the preamble of the Rome Statute, where the parties to the agreement recognise that “such grave crimes threaten the peace, security and well-being of the world”. The terms peace and security are clearly aiming at human safety, but the expression “well-being of the world” could be interpreted

540 Rome Statute, above n 421, art 5.
542 Boas, above n 423.
544 Preamble of the Rome Statute, above n 421.
545 Freeland, above n 14, at 132.
546 Preamble of the Rome Statute, above n 421.
more broadly. “Well-being of the world” could imply the protection from serious harm for humans, as well as for all other species on Earth and nature in general. Furthermore the preamble states that “during this century millions of children, women and men have been victims of unimaginable atrocities that deeply shock the conscience of humanity”. This suggests that the atrocities of concern are not limited to events during war, but also may encompass human suffering from, for example, environmental disasters caused by humans.

The preamble is most certainly neither denying any form of international environmental crime in front of the ICC, nor does it block new developments. That being said, substantive sections of the Rome Statute might currently offer an opening for the prosecution of international environmental crimes, which is why it is worth investigating these possibilities further.

5.1.1.2 Article 5(1) of the Rome Statute

Article 5(1) of the Rome Statute lists the four core ICC crimes: the crime of genocide, crimes against humanity, war crimes, and the crime of aggression. Those four international crimes represent the most heinous crimes the negotiators of the Rome Statute could identify, while debating the foundation of the ICC. The Rome Statute and its commentary suggest that only the most serious crimes have a legal standing before the ICC. The question here is, if and how international environmental crimes can be subsumed under the crimes included in article 5(1) of the Rome Statute?

5.1.1.2.1 Genocide

Genocide is often referred to as the “ultimate” crime and relates to any conduct that aims to destroy in whole or in part a national, ethnic, racial or religious group. Article 6(a), (e) of the Rome Statute lists the possible behaviours which can constitute the actus reus of genocide, which include, for example, “any

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547 Preamble of the Rome Statute, above n 421.
549 Gerhard Werle and Florian Jessberger *Principles of International Criminal Law* (3rd ed, Oxford University Press, Oxford, 2014) at 293; The ICC is, for example, investigating the Darfur conflict in Sudan under the focus of alleged genocide (International Criminal Court “Darfur, Sudan” ICC <www.icc-cpi.int>).
serious bodily or mental harm to members of the group”.\textsuperscript{550} Genocide is indubitably horrible and is often linked to unspeakable acts, but incidents of genocide generally do not affect the entire population of the world. Genocide should of course concern all people in the world, but the actual effects are only felt by the targeted group in question. International environmental crimes, however, largely affect humanity as a whole, due to the lowering of environmental quality around the globe. The continuous loss of biodiversity could be conceived as “species genocide”, naming elephants or rhinoceros as example.

Smog resulting from illegal slash-and-burn land clearance in Indonesia leads to countless deaths in Indonesia and some neighbouring countries.\textsuperscript{551} The number of people dying from smog every year worldwide was estimated to range around two to three million, but this number includes deaths caused by “legal” air pollution.\textsuperscript{552} Next to this more or less “direct” threat of air pollution, it contributes significantly to climate change, which itself causes numerous environmental hazards for human societies.\textsuperscript{553} Despite the fact that smog claims so many deaths, its release can hardly be considered genocide. Not even when it results from illegal activities, such as the mentioned slash-and-burn method, because it is not a “targeted attack on a specific group of people”. Its victims are not specifically selected but based on a number of variables are affected more or less randomly.

Another potential genocide with environmental roots can be seen in the treatment of many indigenous nations. Chapter One revealed the ties between international environmental crimes and the decline of indigenous populations. Albeit the genocide definition provides high thresholds and the conduct needs to be carried out with the aim to destroy, in this case, an ethnic group, the link itself is quite obvious. In terms of indigenous people the “targeted attack” can be established, as corporations or other groups try to obtain indigenous land for cultivation. Indigenous people are often killed, if they resist. The deforestation of

\textsuperscript{550} Rome Statute, above n 421, art 6(b).
\textsuperscript{551} N-tv “Killer-Smog tötet 100.000 Menschen in Südostasien”, above n 39.
\textsuperscript{552} Der Spiegel “Luftverschmutzung toetet drei Millionen Menschen pro Jahr” (17 September 2015) Der Spiegel <www.spiegel.de>.
\textsuperscript{553} Higgins, Short and South, above n 372, at 253.
rainforest, which is often indigenous habitat, causes bodily as well as mental harm for indigenous people: Bodily harm, because the loss of habitat means simultaneously loss of their livelihoods and mental harm, because the stress coming along with the destruction and taking of their habitat has repercussions on mental health. Therefore, international environmental crimes regarding indigenous people could fall within the scope of genocide and should trigger further investigation to determine whether the legal requirements of the crime of genocide can be satisfied.

5.1.1.2.2 War crimes
In most cases war crime will not be the correct genus for international environmental crimes. On the one hand, war crimes are limited in scope to crimes committed during war time; on the other hand, this ICC crime already refers to environmental damage via article 8(2)(b)(iv) of the Rome Statute, which criminalises certain levels of environmental harm during war. This underlines that the environment already enjoys some criminal protection under the Rome Statute.

Later, this chapter will take a closer look at this sole provision of the Rome Statute that expressly mentions the environment.

5.1.1.2.3 Crime of aggression
The crime of aggression has only recently been defined in the Rome Statute. The importance of a definition in legal matters will be outlined in Chapter Six. During the Kampala Conference in 2010, the ICC state parties finally agreed to a definition, leading to the fact that the crime of aggression will be able to be prosecuted by the ICC as soon as two-thirds of the state parties vote to activate ICC jurisdiction over it.554 Article 8 bis(1) of the Rome Statute contains the newly implemented definition of the crime of aggression.555

554 Werle and Jessberger, above n 548, at 546; Willis, above n 425, at 83.
555 Crimes of aggression means “the planning, preparation, initiation or execution, by a person in a position effectively to exercise control over or to direct the political or military action of a state, of an act of aggression which, by its character, gravity and scale, constitutes a manifest violation of the Charter of the United Nations” (Rome Statute, above n 421, art 8(1)).
It is important to point out that the crime of aggression is solely a state crime. Of course, it needs the act of a person, and only individuals are prosecuted for it, but the guilty acts must be carried out in the name of a state. To clarify the act of aggression, article 8 bis(2) of the Rome Statute describes it as:

The use of armed force by a state against the sovereignty, territorial integrity or political independence of another State, or in any other manner inconsistent with the Charter of the United Nations.

This appears to limit the crime of aggression traditional situations in which soldiers of one country are marching on another state’s territory to occupy the land or a bombardment is carried out by on state on foreign soil. War is de facto an ancient form of dispute resolution which the Rome Statute is now attempting to eliminate through criminalisation.

“Classic” international environmental crimes do not fall under this provision. An environmental aspect is hard to find within the crime of aggression, apart from the fact that the environment suffers consequently as a result of a forced invasion. However, an act of aggression resulting in a crime of aggression might be achievable via environmental means. Damming up a river, which is a lifeline for another country, and cutting the whole state from its water supply could well constitute an act of aggression. In 2013, Ethiopian plans for damming up the Nile, triggered harsh reactions from the president of Egypt, who openly spoke of “war”. However, all this cannot really be reconciled with the fact that article 8 bis of the Rome Statute requires the use of armed forces of a state against another state. However, article 8 bis(2)(b) does offer a loophole for environmental crimes. The provision states “...or the use of any weapons by a state against the territory of another state”. In this context, weapons could include biological weapons. For instance, poisoning a river might be an option for an environmental aspect under this provision. The use of biological warfare

556 Rome Statute, above n 421, art 8 bis(2).
557 Rome Statute, above n 421, art 8 bis(2)(a), (b).
559 Rome Statute, above n 421, art 8 bis(2)(b).
in general or armed forces taking advantage of environmental circumstances might have potential to be viewed as acts constituting the crime of aggression. In this sense, an environmental aspect to the crime is certainly conceivable.

5.1.1.2.4 Crimes against humanity

After the 1945 Nuremberg Charter first formulated crimes against humanity they were incorporated in the Rome Statute as one of the four main ICC crimes.\textsuperscript{560} The definition of crimes against humanity is, after years of recognition, still vague,\textsuperscript{561} which opens a chance for international environmental crimes to fall under the definition, but also lowers the technical use of this provision. Humanity needs a functional environment to flourish as its base. Therefore, a crime against this basis could be considered as a crime against humanity itself. The name of this ICC crime already suggests this connection.

Article 7(1) of the Rome Statute lists the acts criminalised by crimes against humanity. To trigger this provision, there must be an attack, which needs to be widespread or systematic, directed against a civilian population. The acts of the accused must be part of the attack and he or she must know that his or her acts constitute a part of the overall attack. Possible actus reus behaviour include, for example, murder or torture.\textsuperscript{562} This ICC crime is designed to protect fundamental human rights, such as life, health, freedom and dignity.\textsuperscript{563} In addition to the individual victims the crime also protects the international community and humanity as a whole.

The aforementioned fires in the Indonesian rain forest, illegally lit to gain more farmland, have been described by some as crimes against humanity.\textsuperscript{564} Furthermore, environmental destruction in general is often rhetorically

\textsuperscript{560} Charter of the International Military Tribunal in Nuremberg (1945), art 6(c); Rome Statute, above n 421, art 5(1)(b).
\textsuperscript{562} Rome Statute, above n 421, art 7(1)(a), (f).
\textsuperscript{563} Werle and Jessberger, above n 548, at 333.
\textsuperscript{564} Oliver Balch “Indonesian Forest Fires” (11 November 2015) The Guardian \textless www.theguardian.com\textgreater.
described as a crime against humanity.\textsuperscript{565} But international environmental crimes or the environment are not mentioned at all in the crimes against humanity provisions of the Rome Statute. However, article 7(1)(k), which opens prosecution to “other inhumane acts of a similar character intentionally causing great suffering, or serious injury to body or to mental or physical health”, might be a gateway to allow international environmental crimes to be prosecuted as crime against humanity. This subsection is a “catch-all” provision and enables the jurisdiction of the ICC to absorb new developments and acts not specifically listed in the Rome Statute.\textsuperscript{566}

The general perception of harmful acts against the environment suits the concept of crimes against humanity.\textsuperscript{567} Environmental damage causes human suffering or serious injury to humanity equally to the other acts listed in article 7 of the Rome Statute. Those acts are directed against humanity as a whole with clear knowledge of the disastrous consequences.\textsuperscript{568} Damaging the ozone layer or polluting the high seas can be named as examples fulfilling the preconditions of article 7(1) of the Rome Statute.\textsuperscript{569} A more specified potential environmental crime against humanity might be the draining of the Hawizeh and Hammar marshlands in Iraq by former dictator Saddam Hussein. This act might qualify as a widespread and systematic attack directed against the civilisation of the Marsh Arabs and is seen as crime against humanity by experts.\textsuperscript{570}

In conclusion, it has to be stated that international environmental crimes suit the scheme of crimes against humanity in the Rome Statute better than they suit the statute’s war crimes provisions.\textsuperscript{571}

\textsuperscript{565} Kloepfer and Heger, above n 467, at 138; John Vidal and Owen Bowcott “ICC Widens Remit to Include Environmental Destruction Cases” (15 September 2016) The Guardian <www.theguardian.com>.
\textsuperscript{566} Hall and Stahn, above n 560, at 235.
\textsuperscript{567} Wattad, above n 547, at 282.
\textsuperscript{568} At 282.
\textsuperscript{569} At 282.
\textsuperscript{571} Wattad, above n 547, at 282.
5.1.1.2.5 Environmental links under article 5(1) of the Rome Statute

In a manner of speaking, all of the four ICC crimes listed in article 5(1) of the Rome Statute are able to encompass environmental aspects, even though only war crimes establishes an expressive link via article 8(2)(b)(iv). Crimes against humanity is the category of international crimes where international environmental crimes might be annexed in the easiest way.

However, there is no obvious link where international environmental crimes could be grafted in. That means on first sight that the ICC generally has no power to prosecute international environmental crimes. To date, the ICC has never prosecuted anyone for committing an international environmental crime.

5.1.1.3 Article 8(2)(b)(iv) of the Rome Statute

The Rome Statute brought along what is sometimes called a revolution of environmental crimes.\textsuperscript{572} Until the Rome Statute entered into force there were absolutely no binding criminal provisions regarding the global environment.\textsuperscript{573} Article 8(2)(b)(iv) of the Rome Statute is the first exclusively ecocentric war crime and international environmental crime in general, meaning that there does not have to be human harm next to environmental damage to constitute a crime.\textsuperscript{574} The use of Agent Orange during the Vietnam War and the Kuwaiti oil wells could have been prosecutable acts under the above-mentioned provision, if the Rome Statute had existed at those times.\textsuperscript{575}

However, the protection of the environment itself is not a primary goal of the Rome Statute. Article 8(2)(b)(iv) has never been used and it seems rather unlikely that this provision of the Rome Statute will be used for prosecution in the near future, because securing a conviction would appear to be a particularly difficult needle to thread.\textsuperscript{576}

\textsuperscript{572} Gilman, above n 378, at 453.
\textsuperscript{573} Kloepfer and Heger, above n 467, at 138.
\textsuperscript{574} Lawrence and Heller, above n 339, at 70-71.
\textsuperscript{575} Freeland, above n 124, at 282.
\textsuperscript{576} Lawrence and Heller, above n 339, at 94-95.
5.1.1.3.1 The difficulty of article 8(2)(b)(iv) of the Rome Statute

This difficulty is due to several reasons. First of all, article 8(2)(b)(iv) of the Rome Statute is only applicable during “international armed conflict”. An armed conflict is “a state of open hostility between two nations, or between a national and an aggressive force”. For such a conflict to be international at least two state parties have to be involved, which is increasingly hard to prove, as the “classic” direct confrontation of two or more nations is more and more avoided and most armed conflicts are proxy wars fought by irregular armed groups.

Furthermore the provisions actus reus requires “widespread, long-term and severe damage to the natural environment” and that damage must be “clearly excessive in relation to the concrete and direct overall military advantage anticipated”. This physical act of the crime alone sets out a huge hurdle, as widespread, long-term and severe must all simultaneously demonstrated. As the provision in question consists of three main parts, the mentioned physical act, a mental component and also an exculpation clause, the perpetrator of the serious and wilful harm to the environment might be excused in the end by the fact that the act led to military advantage that outweighed the harm imposed. All these key terms are not defined in the Rome Statute itself, which causes ambiguity regarding the requirements and leaves room for speculation. A further complication is that article 22(2) of the Rome Statute sets out that, in cases of multiple possible interpretations, the definition of a crime must be interpreted in a manner that would be in favour of the accused.

Next to these problems is that the article’s mens rea requires knowledge of the destructive effects, which could be difficult to prove. Because there is no specific definition, a defence claiming that the scope of the article’s requirements was misunderstood is likely to succeed.

Thus, despite all the praise for the first ecocentric international crime, it becomes clear that the threshold for proving it is nearly unreachable and the

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577 Rome Statute, above n 421, art 8(2)(b).
579 Drumbl, above n 199, at 127.
580 Lawrence and Heller, above n 339, at 94-95.
581 At 79.
actual application of article 8(2)(b)(iv) of the Rome Statute is likely to be limited.

5.1.1.3.2 Article 8(2)(b)(iv) of the Rome Statute in the light of the Geneva Additional Protocol I and the Environmental Modification Convention

Additional Protocol I to the Geneva Conventions and the Environmental Modification Convention (ENMOD) provide some assistance, but both deliver varying accents.\(^{582}\)

The ENMOD Convention refers mainly to the manipulation of natural processes and the dynamics, composition or structure of Earth, including Earth’s biota, lithosphere, hydrosphere and outer space.\(^{583}\) ENMOD’s biggest difference to the ecocentric crime in the Rome Statute is that the Convention states in its article 1 that environmental damage has to be “widespread, long-term or severe”.\(^{584}\) The change of the word “and” to “or” makes a huge difference and broadens the scope of the ENMOD Convention widely in comparison to article 8(2)(b)(iv) of the Rome Statute.\(^{585}\) In ENMOD, only one requirement of the triplet needs to be fulfilled.\(^{586}\) Furthermore the ENMOD Committee on Disarmament has published definitions for the three terms defining the harm.\(^{587}\)

Following the Committee’s approach, widespread means an “area of several hundred square kilometres”, long-term refers to “a season” and severe means “seriously or significantly disruptive or harmful to life or natural resources”.\(^{588}\)

The provision of Additional Protocol I relates closer to the Rome Statute.\(^{589}\) In article 55 of the Protocol I, the requirements are “widespread, long-term and severe” and they have to be “clearly excessive in comparison to the military advantage”, which basically sets out the same threshold as that of the Rome Statute.\(^{590}\) Whereby “severe” and “widespread” are not defined in the

\(^{582}\) Gilman, above n 378, at 454.

\(^{583}\) Werle and Jessberger, above n 548, at 492.


\(^{585}\) Gilman, above n 378, at 454.

\(^{586}\) Drumbl, above n 199, at 127.

\(^{587}\) At 128.

\(^{588}\) At 128.

\(^{589}\) Lawrence and Heller, above n 339, at 73.

\(^{590}\) Rome Statute, above n 421, art 8(2)(b)(iv); Protocol Additional to the Geneva Convention of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts 1125
context of the Protocol, “long-lasting” means “a period of at least decades” under Protocol I.\(^{591}\) This proximity of the languages in the Rome Statute and Protocol I comes from the fact that the Rome Statute was created in the light of the Geneva Conventions, meaning that the stricter definitions of the ENMOD Convention might not be applicable. Despite the close link between article 8(2)(b)(iv) of the Rome Statute and article 55 of Protocol I, the Rome Statute provision is the more restrictive one, because Protocol I does not require an anticipated military advantage.\(^{592}\) Article 55 of Protocol I simply outlaws all attacks at the environment.\(^{593}\)

Doerman raises the question, whether article 8(2)(b)(iv) of the Rome Statute is even a new development.\(^{594}\) It reflects an intermixture of the principle of proportionality, which is a rule of customary international law and elements of article 35(3) and 55 of Protocol I.\(^{595}\) All these structural problems allow a huge leeway for interpretation and accelerate a number of concerns for international environmental criminal sanctioning, rather than solving them. However, the explicit mentioning of the environment in the most developed international criminal forum is another step forward and cannot easily be compared to the general explanations within the Additional Protocol I or the ENMOD Convention.

5.1.1.3.3 **The practical use of Article 8(2)(b)(iv) of the Rome Statute**

Most accused persons that appear before the ICC can be prosecuted based on more than one crime under the Rome Statute. It would not seem necessary to take the risk of a prosecution of a difficult to prove environmental war crime when the goal of conviction is easier achieved via another provision.\(^{596}\) This is a fortiori sad because every act of war brings along environmental damage next to human suffering.\(^{597}\)

\(^{591}\) UNTS 3 (opened for signature 08 Jun 1977, entered into force 07 Dec 1978), art 35; Lawrence and Heller, above n 339, at 73.

\(^{592}\) Drumbl, above n 199, at 128.

\(^{593}\) Kloepper and Heger, above n 467, at 140.

\(^{594}\) Doerman, above n 339, at 167.

\(^{595}\) At 166.

\(^{596}\) Gilman, above n 378, at 455.

\(^{597}\) At 447.
However, it is a fact that the most serious environmental damage emerges during times of peace.\(^{598}\) The incredibly high actus reus and mens rea of article 8(2)(b)(iv) of the Rome Statute combined with other institutional problems of the ICC limits the use of this criminal provision and results instead in academic discussions about its ineffectiveness.\(^{599}\) This is why article 8(2)(b)(iv) of the Rome Statute cannot fulfil the needs of the international community for an effective approach against international environmental crimes. The existing ecocentric crime in article 8(2)(b)(iv) has no practical use, since it requires a nearly unreachable high threshold and will thus be very difficult to prove.\(^{600}\) In a time where environmental protection and awareness is increasing, this provision is simply not suited to contemporary needs and expectations.\(^{601}\) But this provision does show that there is already a case for environmental protection in international criminal law.\(^{602}\)

5.1.1.4 Policy Paper on Case Selection and Prioritisation

The aforementioned part revealed that all of the current Rome Statute crimes can be read to at least imply a link to the environment. However, there is no distinct provision stating that environmental harm outside of war is handled as a crime. In September 2016, the ICC Office of the Prosecutor under the leadership of Fatou Bensouda, announced via the Policy Paper on Case Selection and Prioritisation that the court will now also focus on arms trafficking, human trafficking, terrorism and financial crimes.\(^{603}\) Earlier attempts to statutorily widen the jurisdiction of the ICC for acts such as drug trafficking or terrorism failed during the Kampala Conference in 2010.\(^{604}\) This makes Bensouda’s announcement even more surprising.

\(^{598}\) Wattad, above n 547, at 282.
\(^{599}\) Gilman, above n 378, at 457.
\(^{600}\) Kloepfer and Heger, above n 467, at 140; Birnie and Boyle, above n 237, at 285.
\(^{601}\) Freeland, above n 124, at 220, 226; Werle and Jessberger, above n 548, at 492, 493.
\(^{602}\) Birnie and Boyle, above n 237, at 285.
\(^{604}\) Marchuk, above n 369, at 71.
Interestingly, the Prosecutor has stated that her office will also be investigating acts involving environmental destruction and land grabs. The paper states:

In this context, the office will give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, inter alia, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land.

This statement can be seen as a signal that the ICC is willing to pursue cases relating to environmental destruction and misuse of land as crimes against humanity. The court has earned widespread praise for its announcement. This widening of the court’s focus can lead to compelling effects.

However, it is unclear on what legal grounds the ICC justifies this sudden interest in international environmental crimes. It is possible that it is a sign that the ICC is taking a new look at crimes against humanity and sees them in a much broader context. As described above, the concept of crimes against humanity already contains all the aspects to include international environmental crimes. The preconditions of article 7(1) of the Rome Statute for international environmental crimes are, at least for some acts, fulfilled. The interpretation of this provision only needs to be closer to an environmental approach. Adopting this approach will carry with it serious side effects. Not only politicians, military commanders and rebel leaders would be potentially subject to prosecution, but also private individuals or CEOs of corporations. It could also be part of an “Al Capone-Strategy”, which is used when you cannot convict a

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605 Office of the Prosecutor, above n 602.
606 Office of the Prosecutor, above n 602.
608 Taylor, above n 606.
609 Taylor, above n 606.
610 John Vidal and Owen Bowcott, above n 564.
611 Wattad, above n 547, at 282.
612 Shehab Khan “CEOs can now be tried under international law at The Hague for environmental crimes” (19 September 2016) The Independent <www.independent.co.uk>; Taylor, above n 606.
613 Taylor, above n 606.
criminal of the main crimes he is suspected of, but you can successfully prosecute the perpetrator for other connected crimes.\footnote{Taylor, above n 606.}

Naturally, this shift has a huge symbolic meaning and it might dramatically shift the court’s directions in the future.\footnote{Chris Arsenault “International Court to Prosecute Environmental Crimes in Major Shift” (15 September 2016) News Trust <www.news.trust.org>; Taylor, above n 606.} This step acknowledges the increasing global recognition of the problem of international environmental crimes.\footnote{Arsenault, above n 614.} If a national judicial system is not sufficient, victims will be able to seek justice within the ICC.\footnote{Arsenault, above n 614.} This can be generally seen as a welcome new development.\footnote{Taylor, above n 606.} But there is no guarantee that, even if the ICC fully commits to the policies regarding international environmental crimes outlined in the paper, that the Office of the Prosecutor will also be able to execute them in practice. Whether the ICC can already judge international environmental crimes or not, is still based on a particularised interpretation and not on a solid statutory base. How this policy paper actual influences the work of the ICC remains to be seen.

\subsection*{5.2 Environmental reformation of the International Criminal Court}

As mentioned above, a reformed ICC might be one of the best shots to handle international environmental crimes. In order to fully transform the ICC into an institution able to effectively oversee criminal tampering with the global environment, there might be some formal adjustments to the ICC that would be necessary to implement.

New developments are not an unusual thing in international law. In 1948 the General Assembly of the UN first recognised the need for a permanent international court to deal with serious atrocities.\footnote{United Nations Departement of Public Information “The International Criminal Court” (2002) UN <www.un.org>.} The International Law Commission drafted two versions in the early 1950s, but the political tensions during Cold War hindered any developments in this regard.\footnote{Gary T Dempsey “Reasonalbe Doubt: The Case Against the Porposed ICC” (1998) 311 Cato Policy Analysis 3 at 3.} In 1998 the ICC was finally agreed upon. This shows that fruition of progress in international takes time. The current global political status does not give reason to expect an
environmental reformation of the ICC any time soon,621 but eventually the time for this reform will come. In fact, an environmental reform of the ICC could be new common ground to overcome the current criticism and convince the ICC parties and other states to join in order to face “new” common problems. A reform would be a real chance for the ICC to prove its value for the international community and, separately from environmental issues, further entrench itself in the international system of law. The “greening” could be the begin of a new area in the history of the ICC.

As outlined above the first step would be to require the court to handle environmental matters within every case with more care and sensibility. This general sensitisation could also be applied to the ICJ. This step might already have begun with the announcement that the ICC’s Office of the Prosecutor will give more attention to environmental issues. However, the aforementioned policy paper leaves more question marks than answers and the jurisdiction of the ICC for these matters is still dependant on an interpretation of its jurisdiction that is not well founded in the text of the Rome Statute. This is why a more formal environmental reformation might be a preferred and more legally sound solution.

5.2.1 What would a “green” International Criminal Court look like?
Ideally, a “green” amendment to the Rome Statute needs to implement three new provisions in order to tackle these crimes forcefully. First of all, ecocide should be established as fifth core crime under article 5(1) of the Rome Statute. Secondly, an expressive extension of crimes against humanity to include some international environmental crime that fall short of ecocide should be implemented. Thirdly, a procedural change should be made to obtain environmental views and implement environmental expertise in every case.

621 Kloepfer and Heger, above n 467, at 139.
5.2.1.1 Ecocide as fifth crime under article 5(1) of the Rome Statute

In 1993, Berat first spoke of the creation of an ecocide convention and a proposed tribunal relating to it.\(^{622}\) Following this proposal ECOSOC included this idea in its draft articles regarding criminal law and the protection of the environment.\(^{623}\) Eight years later, the Rome Statute was born. The proposal to include ecocide in the statute was discussed during the negotiations in Rome, but environmental crime was almost completely removed from the final text of the later statute, leaving only the war crime of article 8(2)(b)(iv).\(^{624}\) In 2010, Higgins renewed Berat’s claim and renewed the call to make ecocide a fifth major international crime.\(^{625}\) In 2016, the aforementioned policy paper showed a growing interest of the ICC’s prosecutors in environmental matters. This brief overview of the development shows that has been significant movement to include further forms of environmental harm within the area of international criminal law.

Despite the fact that ideally all behaviour harming the environment should be penalised, ecocide should be reserved for the most heinous crimes.\(^{626}\) That leaves room for “minor” international environmental crimes as described in Chapter Three. Such an approach would basically result in a two-tiered system of international environmental crimes. Ecocide, as environmental counterpart to genocide, forms the top of the international environmental crime scheme. The law of ecocide would prohibit mass damage, destruction or loss of ecosystems and would impose a legal duty of care upon persons in positions of superior responsibility.\(^{627}\) Lesser international environmental crimes would cover any other significant environmental degradation through criminal activities.

Why criminalise deforestation, water pollution or extraction of oil in specific areas as new “ICC crime”? There are strong arguments in favour of the international criminalisation. Some countries have already implemented ecocide

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\(^{622}\) Berat, above n 2, at 329, 343, 348.
\(^{623}\) United Nations Economic and Social Council The Role of Criminal Law in the Protection of the Environment, above n 542.
\(^{624}\) Mehta and Merz, above n 41, at 4.
\(^{625}\) Higgins, above n 8, at 71.
\(^{626}\) Berat, above n 2, at 329, 343, 348.
\(^{627}\) Higgins, Short and South, above n 372, at 264.
as a domestic crime, as, for example, article 342 of the Vietnam Penal Code shows.\textsuperscript{628} The need to provide a liveable planet to future generations and indigenous people goes along with all the environmental changes and disasters Earth is facing today, such as massive carbon pollution.\textsuperscript{629} Chapter One has outlined the enormous interconnectedness of the environment and human activity in total. Therefore deforestation of the Amazon rainforests or the extraction of oil sands in Canada should be thought of as not in line with a sustainable healthy future of the world.\textsuperscript{630} Alarmingly water pollution accounts for more deaths than all forms of human violence, which includes victims of war.\textsuperscript{631} Furthermore ecosystems can collapse due to the impact of international environmental crimes. A breakdown of an ecosystem can lead to inner-state or international conflicts and ultimately war.\textsuperscript{632} Depletion of resources carries the same possibility of worldwide security threats.\textsuperscript{633}

In fact, ecocide contains all the elements that would make it worthy of being named an “ICC crime”. Ecocide can be defined as:\textsuperscript{634}

\begin{quote}
Extensive destruction, damage or loss of ecosystems of a given territory, whether by human agency or other causes, to such extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished.
\end{quote}

As a comparison, genocide roughly means the “the deliberate killing of a large group of people, especially those of a particular nation or ethnic group”.\textsuperscript{635} The genocide provision of the Rome Statute lists some exemplary acts, such as “causing serious bodily harm or mental harm to members of the group” or “imposing measures intended to prevent births within the group”.\textsuperscript{636} Within these descriptive examples of article 6 of the Rome Statute there are similarities to be found between genocide and ecocide. For example, “causing serious bodily harm to members of the group” can be detrimental to an ecosystem, potentially leading to its collapse.

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\textsuperscript{628}Vietnamese Penal Code 1999 (Vietnam), art 342. \\
\textsuperscript{629}Mehta and Merz, above n 41, at 3, 4, 5. \\
\textsuperscript{630}Higgins, above n 8, at 63. \\
\textsuperscript{631}UNEP UN-Habitat Report Sick Water? - A Rapid Response Assessment (UNEP, Nairobi, 2010). \\
\textsuperscript{632}Higgins, above n 8, at 151. \\
\textsuperscript{633}At 151. \\
\textsuperscript{634}At 63. \\
\textsuperscript{635}“Genocide” Oxford Dictionary <www.oxforddictionaries.com>. \\
\textsuperscript{636}Rome Statute, above n 421, art 6(b)(d).
\end{flushright}
harm...” (b) can be translated in an ecocide provision to “causing serious environmental harm...”. This juxtaposition makes clear that genocide handles human “destruction” and ecocide covers environmental, or “natural”, destruction, which in the end leads, as shown above, to human annihilation. It is about time to recognise that “environmental cleansing” is as horrific as ethnic cleansing. The basis of life, society and future generations gets destroyed when ecocide is committed.

As there cannot be a crime without punishment there needs to be an enforcement mechanism, which ensures that ecocide is applied equally to natural persons in their position within legal persons, public authorities and states. This accountability for decision makers in companies, organisations or states is of high importance to develop ecocide as fifth ICC crime. An ecocide provision needs to be implemented to reduce threats of environmental destruction.

5.2.1.2 Further notable amendments for a green International Criminal Court

A green reformation does not stop with an ecocide provision. In a general sense it must be mentioned that the sensibility of the ICC in regards to environmental offences should be sharpened. An amendment of the preamble could do so. This general sensitisation could also be an option for the development of the ICJ.

In a more specific sense the procedures of the ICC should be changed. A fair trial is also a question of expertise and specialisation. Dealing with the global environment means understanding international environmental law, international criminal law, politics as well as being able to understand the science behind the cases to get a glimpse of impacts or drivers. Currently, there is no special international environmental crime consultant within the ICC. To ensure that environmental matters are considered in a legal as well as in a scientific way, a special judge or an internal counsellor could be appointed in every case. This person would deliver the needed expertise in international environmental law and environmental science to every case. Furthermore the court could be more open for NGOs and individuals to make “friend of the court”

637 Drumbl, above n 199, at 144.
638 Mehta and Merz, above n 41, at 3.
639 Berat, above n 2, at 340.
submissions. As mentioned above NGOs are of high importance in the fight against international crimes. Currently any state party or the UNSC can refer a case to the ICC.\footnote{Rome Statute, above n 421, art 13(a), (b).} In addition to this the Office of the Prosecutor can decide on its own to start looking into a potential case.\footnote{Rome Statute, above n 421, art 13(c).} The Office of the Prosecutor is then responsible to open an investigation and gather evidence for a potential trial. Article 15(2) of the Rome Statute allows the prosecutor to seek information, inter alia, from NGOs and other reliable and appropriate sources.\footnote{Rome Statute, above n 421, art 15(2).} NGOs could help with these processes and also refer investigation material to the court to start and fuel investigations. Even if this is not an established method today, the opening of the ICC for environmental issues could lead to environmental NGOs sharing their information with the ICC. The opening for individuals could lead to more public engagement within this matter. That would strengthen public support and the “belief” in international entities. In the end this would strengthen the court itself.

To honour the difference of ecocide and “normal” international environmental crimes and to underline the importance of the new environmental focus of the ICC, article 7 of the Rome Statute would need to be modified. As outlined above, crimes against humanity are the best fit for most types of international environmental crime. The inclusion of a specific link within the provision would bring clarity. The amendment would make clear that crimes against the environment are to be regarded as crimes against humanity.

All this does not mean that the ICC would replace national criminal courts in matters of the environment. Following the principle of complementarity national courts still have priority.\footnote{Rome Statute, above n 421, art 1.} The ICC simply takes over the most relevant cases regarding environmental criminal harm on the international level or where a state party is not able or unwilling to conduct judicial investigations or prosecutions.
5.2.1.3 Possibility of amendments of the Rome Statute

Amendments to the Rome Statute are possible under articles 121 and 122 of the Rome Statute. As article 122 of the Rome Statute solely relates to provisions of an institutional nature, it is section 121 which needs a closer look.

Via article 121 of the Rome Statute, ecocide could be added as a fifth international crime to article 5 of the Rome Statute. A definition of ecocide and the necessary procedural amendments could be made in the same manner. Amendments to the statute can be proposed by any state party. For adoption, amendments require a two-third majority vote in the Assembly of States Parties or at a Review Conference. Paragraph 5 of article 121 specifies that even if an amendment is formally adopted, it only becomes effective for the states that choose to ratify the amendment. Thus, the Rome Statute allows hesitant states to not accept the amendment and be left out of the overall jurisdiction of the court. This allowance would provide time for willing states to convince others to adopt the new environmental amendments.

The other mentioned innovation, an extension of article 7 of the Rome Statute, is more or less an amendment to an already existing ICC crime. Again article 121 of the Rome Statute is the gateway for an amendment of article 7 of the Rome Statute. An environmental crime could be added to the catalogue of article 7(1)(a)-(k) of the Rome Statute.

After adding a new Rome Statute crime to the Rome Statute the elements of these crimes could be amended via article 9 of the Rome Statute. These elements provide some clarity in setting out the required actus reus and mens rea for every crime in the Statute. According to paragraph 2 of this article 9 of the Rome Statute amendments to the elements can be proposed by any state party, the judges acting by an absolute majority and the prosecutor. To be adopted they also need a two-thirds majority of the members of the Assembly of State Parties. However, this would be a second step after enshrining an international environmental crime within the Rome Statute.

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644 Rome Statute, above n 421, art 121, 122.
645 Rome Statute, above n 421, art 121(1).
646 Rome Statute, above n 421, art 121(3).
647 Rome Statute, above n 421, art 9(2).
That being said, it becomes clear that a green reformation, as suggested, is possible with a two-third majority under article 9 and 121 of the Rome Statute.

5.2.2 What would be the benefits of an environmental reformation of the International Criminal Court?

The most important benefit for a reformation like this would be the formal recognition of the environment at the highest level of criminal jurisdiction. As mentioned above, environmental crime is often still seen as a minor offence. With these amendments future generations will see it as a classic form of crime and will regard them as one of the major international crimes. This alone would be a huge step forward to a more sustainable future.

The ICC already offers the necessary infrastructure for criminal prosecution and brings along almost two decades of experience in international criminal prosecution. After the policy paper of 2016, it seems as if the court itself is only waiting for a specific empowerment to begin judging environmental wrongs. After the amendments proposed above, the court would basically be "ready to go".

The ICC is empowered to prosecute only natural persons. There is no prosecution of abstract entities, such as corporations. But as these companies are often deeply involved in environmental destruction, the environmental reform would offer a way to go after the person responsible within corporate structures. A foundational principle of ICC procedure is that it seeks to prosecute persons who bear the greatest responsibility for a crime. The benefit that results from this is that the potential personal jurisdiction of the ICC over CEOs and other high ranking persons would deter them from doing damaging things to the international environment. In times where some companies are more powerful than some states, a regulatory provision like this is advantageous to stop harm from happening and prevent CEOs hiding behind complex corporate structures.

The purpose of a criminal court is to determine whether a specific act of an individual is lawful or not. On the one hand, unlawful conduct shall be punished and branded as wrongful behaviour and offer some rehabilitation for

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648 Freeland, above n 14, at 117.
the convicts, but on the other hand will prevent environmental damage via the deterrent-effect. The empowerment of the ICC to judge international environmental crimes could act as a deterrent for potential perpetrators on the highest imaginable level. This would present a lot of leverage to those fighting for environmental protection and justice.

Relying on the ICC would also circumvent the problems that would be encountered in attempting to create new international institutions, such as the aforementioned ICE. Tough negotiations to set up an entirely new international court would not be necessary. Of course, negotiations to amend the Rome Statute are required, but they would be much easier as they would be conducted only among the ICC member states, the vast majority of which are strongly committed to the court. The ICC already has a base of members. The question of funding would not need to be broached, because the ICC has a funding system already in place.

5.2.3 What would be the challenges of an environmental reformation of the International Criminal Court?

Nevertheless the ICC is not an uncontroversial entity. This judicial organ might not be, despite its criminal focus, the most effective way to sanction international environmental crimes.649

In speaking of the ICC’s flaws, it has to be noted that the ICC has been suffering from a crisis during the last few years. Several African states have stated that they are willing to withdraw from the ICC’s jurisdiction.650 The main reason for this trouble is the focus of the ICC on African conflicts, African states and African leaders. Especially, the indictment of sitting Sudanese president Omar al-Bashir has been construed by some as the latest example of European neo-colonial interference in Africa.651 The criticism that the ICC is used as a tool of Western imperialism flares up quite regularly, as the court focusses on smaller, less powerful states and ignores rich and influential nations. This crisis has the power to greatly diminish the jurisdictional force of the ICC.

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649 Drumbl, above n 199, at 145.
651 At 271.
Another problem regarding the jurisdiction of the ICC is its legal independence from the UN. The legal basis for the Court’s existence is an international treaty, the Rome Statute. That means that the ICC does not have worldwide jurisdiction in all criminal matters and following the principle of *pacta tertis nec nocent nec prosunt*, absent intervention by the UN Security Council, only parties to the Rome Statute subject to it. Currently, 124 nations are party to the Rome Statute, but with powerful key states like Russia, China and the United States absent. It is therefore unconvincing to speak of an effective worldwide criminal jurisdiction. Cooperation with non-party states is solely based on voluntary gestures. This leads to a general problem of international law. States, who are not parties to treaties, operate as “free-riders” and take advantage of their freedom from the self-limitation measures agreed to by the other states. This can result in serious economic repercussions in a time of globalisation, not to speak of serious environmental harm due to the circumvention of common standards. Furthermore, the court’s jurisdiction is limited in territorial, personal and temporal aspects. Only matters after 1 July 2002 can be prosecuted, and for jurisdiction to attach the act must have been committed either in the territory of a state party or by a national of a state party. The only exception to territorial and personal jurisdiction is if the UN Security Council refers a situation to the ICC for investigation and prosecution.

The existing structure of the ICC is on the one hand a positive thing, but on the other hand brings along with it significant built-in hurdles. It diminishes the possibility for environmental issues to fully unfold within the ICC. International environmental crimes would be pressed within the existing limited framework.

Part Seven of the Rome Statute addresses punishments of convicted individuals and limits punishments to imprisonment, fines and forfeiture. This means there is no room for the court for restitution, remediation of blight,

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652 Rome Statute, above n 421, art 11(1).
653 Rome Statute, above n 421, art 12(2)(a).
654 Rome Statute, above n 421, art 12(2)(b).
656 Rome Statute, above n 421, art 77-80.
civil liability or clean up of the damage, the need for which would be very important in international environmental criminal cases. This simply does not meet the requirements for an effective prosecution for the unique nature of international environmental crimes.

The strengthening of international environmental criminal laws will, of course, trigger higher short-term costs to conduct criminal investigations press criminal charges. These short-term cost should be seen in the light of the many environmental, economical and human health benefits following a better environmental management through criminal law.

5.3 Conclusion
The ICC is the first court which comes in mind, when thoughts turn to the need to prosecute international crimes. Despite the mentioned crisis of the ICC, it is still the most developed international criminal legal institution. Since the foundation of the ICC, the handling of international crime has made a huge step forward. It is the environmental aspect which cannot be included in that success story and needs further attention.

The ICC’s task is the handling of the most heinous crimes, which arguably contain international environmental crimes as well. The ICC might already be the solution of the problem and even be equipped with the power to judge international environmental crimes under article 7 of the Rome Statute. This is still subject to various interpretations, but shows in the light of the mentioned policy paper a general suitability. However, the combination of the open Preamble of the Rome Statute, the policy paper of the Office of the Prosecutor and the fact that environmental degradation can, under certain circumstances and on the basis of a wide interpretation, already be subsumed under article 7 of the Rome Statute offers a solid starting point for an expressive penalisation of international environmental crimes. An environmental reformation would be a small change in international policy, but one with a wide and important impact. Given the aforementioned reasoning it is not tolerable that environmental destruction is not recognised as one of the world’s most serious

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657 Mehta and Merz, above n 41, at 5.
crimes. It is about time to grant them a standing next to genocide, crimes against humanity, war crimes and the crime of aggression.

To overcome the uncertainty as well as the currently existing issues a “green” reformation and a new “green” focus of the ICC could help. The shopworn ICC could experience a new revival with this task. Therefore a reform of the ICC is a serious alternative to tackle international environmental crimes. A World Environment could be of help in the sphere of this development.
Chapter Six

The International Court for the Environment

Could the fictional International Court for the Environment institution offer a solution for the problem of international environmental crimes?

6.1 Introduction
From time to time international law needs new stimuli for further development. The described international challenges crave for effective international action. Bodies established to address global challenges more appropriately, or to promote international law in general, provide these stimuli. Just as the establishment of the WTO and the ICC set new benchmarks in international law, the creation of new international bodies addressing environmental challenges can open a new chapter for global environmental governance and preservation.

The following section evaluates, whether an international environmental court is a useful addition to the existing international institutions and can help to contain international environmental degradation.

6.2 How might an International Court for the Environment look?
The ICE would be the primary court dealing with all sorts of international environmental matters. The proposed court was not intended to be a specific international criminal court, but to be a general entity operating on the international level to solve international environmental problems. Of course, international environmental crimes would not be the only concern for the ICE. That is why it is not called an “International Criminal Court for the Environment”. However, international environmental crimes would play a central role on international level and they could therefore be a part of the jurisdictional powers of the potential ICE.

658 ICE Coalition, above n 366, at 4.
It has to be noted, that there is not one common agreed idea for an ICE, but one idea with a lot of different facets.

6.2.1 The development of the idea of an International Court for the Environment

In 1920 the PCIJ was founded mainly because of the tragedy of World War I and the realisation that an increasingly globalised world needs international courts as an anchor. The PCIJ should work as a guardian of international relations to ensure a peaceful coexistence. Since then new international jurisdictional organs have been formed to stabilise international relations. In an even more globalised world the global problem of worldwide environmental degradation through international environmental crimes is apparent. In many ways the situation today driving demand to set up a new specialised environmental court does not seem to be much different to that which drove the establishment of the PCIJ in 1920. Global environmental problems are more than obvious and multifaceted today.

Many international efforts to tackle environmental degradation or crime are often eclipsed by issues seeming to be more pressing or simply offering more media attention. Since the attacks on the World Trade Centre in 2001, terrorism is the highest ranking threat of many states. The disproportionate media attention on terror makes it look like the by far most pressing issue in international relations. Of course, terrorism cannot be denied as a critical problem, but in fact the overall international environmental damage, is responsible for far more harm than all terror attacks combined.

The idea for an international environmental court is not entirely new. In 1992, the International Court of the Environment Foundation (ICEF) was established to promote the establishment of an ICE.659 Only one year later the final statement of the first ICEF Conference set out the need for general international jurisdiction for global environmental problems.660 In the following years the ICEF campaigned in support of the idea in a number of fora and to

659 ICEF is a non-profit NGO which promotes the creation of an International Court of the Environment; Pedersen, above n 487, at 548.
By promoting the establishment of a judicial body such as an International Court for the Environment, the international community would effectively respond to the challenge—and also exciting opportunity—of how States and non-state actors can actively partake in ensuring compliance to globally agreed commitments on sustainable development.

To this day many scholars promote this idea and demand political and lawmaking action. In 2010 the Faculty of Architecture of the University of Pennsylvania and the ICE Coalition launched a project to create a building suitable to host the ICE. This project lead to several astonishing conceptions of the building for a potential new international court and underlines the seriousness behind the idea. The construction of the building is of course not of significant legal relevance, but it underlines the seriousness and deepness of the idea.

Despite this promotion of the idea of an ICE, many experts see only a small chance of an ICE being created. The establishment of an international court is a difficult task and requires strong negotiations. Sands objects to the foundation of an ICE in the near future on the basis that no environmental dispute is solely international. Therefore the existing domestic courts dealing with environmental crimes are sufficient for appropriate litigation. In contrast to Sands point, no environmental problem is wholly domestic and national courts

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661 The ICE Coalition represents a number of environmental, legal, business, academic and NGO stakeholders who are in favour of an International Court for the Environment; Pirro, above n 659; Pedersen, above n 487, at 548.
662 ICE Coalition, above n 366, at 12.
663 Riches and Bruce, above n 259, at 2; Stephen Hockman “The Case for an International Court for the Environment” (2010) 3(1) Journal of Court Innovation 215 at 229; Postiglione, above n 308, at 323.
664 ICE Coalition and University of Pennsylvania "Penn Design Project" ICE Coalition <www.icecoalition.org>.
665 Riches and Bruce, above n 259, at 5.
666 Sands, above n 507, at 6-7.
have to work within strict boundaries. In an increasingly globalised world an ICE could handle legal questions with a vast international reach more appropriately. Pedersen expressed his scepticism with the idea of an ICE in 2012 with the remark that, if it is not possible to persuade party states to agree upon a continuation of the Kyoto Protocol because of their fears for their economies then it is unlikely that there will be support for a powerful ICE.  

In 2013 Carroll said that he is often confronted with the phrase “If we can’t create an effective climate change treaty, how are we going to agree on enforcing it in an international court”. As it turns out just three years later a new climate change agreement was made. Whether this agreement is sufficient and effective remains to be seen, but its mere existence shows that there is a lot of movement in this area and things can change fast. The idea of an ICE might seem idealistic, but the same was said about the UN and the ICC before these institutions were founded. Yet today, the UN occupies the centre-stage in the international community, and the ICC is recognised as a legitimate international court. Admittedly the chances of states signing on to a project like an ICE are not very high. Nevertheless it might be worth a try to protect the environment. Big projects often start with a low chance of success.

6.2.2 What is behind the idea an International Court for the Environment?

As mentioned at the beginning of this chapter, international environmental crimes are by far not the only environmental problem on international level. An increase in global human population, general trans-border pollution, dumping hazardous waste at sea, ozone layer destruction, the greenhouse effect, desertification or the disastrous impacts due to the policies of industrialised states towards third world countries are only part of all international environmental challenges. For all these problems the ICE would be the

667 Pedersen, above n 487, at 556.
669 Paris Agreement on Climate Change, 2015.
670 Hockman, above n 662, at 226.
671 At 230.
672 Postiglione, above n 308, at 323.
primary court dealing with all sorts of international environmental matters.\footnote{ICE Coalition, above n 366, at 4.} The ICE would be the court of final resort for the most serious environmental cases on our planet.\footnote{Hockman, above n 662, at 229.}

The rapid growth of MEAs, statutes and national constitutions concerning the environment is in desperate need of specialised interpretation.\footnote{ICE Coalition, above n 366, at 12.} The ICE could provide a steady internationally harmonised solution. A new ICE could enforce general international environmental law and decide on disputes arising from treaties or out of customary law.\footnote{Hockman, above n 662, at 228.} For domestic courts the ICE could provide assistance and further guidance for questions with international relevance. Furthermore, the ICE could work as a last resort. Domestic environmental cases could proceed up to the ICE, for example, by appeal or on request of the judges. The ICE could also function as a review body for decisions of other international bodies related to the environment, such as the Kyoto enforcement branch.\footnote{At 229.} Through its work the ICE could also affect the business world. The court could, for example, set out environmental guidelines, develop risk management programs and improve practices to reduce environmental catastrophes.\footnote{At 224.}

Environmental issues most often raise disputed scientific claims, which result in two or more different views of the science being present.\footnote{Sands, above n 507, at 4.} Lack of knowledge is one of the main concerns regarding the existing international courts and was even pilloried by Judges Simma and Al-Khasawneh in the \textit{Pulp Mills Case} in 2006.\footnote{Riches and Bruce, above n 259, at 1.} That is why specialists, who not only have expertise in legal questions, but also in environmental science, are needed. To ensure that scientific aspects are considered carefully, the judges could hear evidence from experts in the relevant fields and decide whose is most compelling. Another option would be that the ICE itself has a scientific committee, which provides additional environmental background knowledge and makes profound

\begin{footnotes}
\item[673] ICE Coalition, above n 366, at 4.
\item[674] Hockman, above n 662, at 229.
\item[675] ICE Coalition, above n 366, at 12.
\item[676] Hockman, above n 662, at 228.
\item[677] At 229.
\item[678] At 224.
\item[679] Sands, above n 507, at 4.
\item[680] Riches and Bruce, above n 259, at 1.
\end{footnotes}
recommendations to the judges for a final decision. The creation of special panels, which, for example, deal solely with pollution or deforestation matters, would be another possibility. These panels could help the judges to develop maximum expertise in one particular field on a legal and on a scientific basis and to answer on complex cases with maximum expertise. However, this would need a longer development. For the judges Sands suggests a mixed composition of specialised environmental judges and judges with a more general background to absorb all the different contexts international environmental law involves.

There are a number of possibilities to ensure the ICE decides its cases with maximum expertise and a mixture of all these possibilities could be the preferable one. An internal scientific committee helps the ICE to prepare the cases and external specialists provide further information to the judges to reach a balanced verdict.

However, this court would not primarily be a criminal one which would be a prerequisite to deal with international environmental crimes. Lately every court fulfils its own obligation on international level, like national criminal courts or national constitutional courts do on national level. The ICJ primarily handles the relationships between states, the ICC looks after the most heinous crimes and the Special Court for Sierra Leone only looks after what happened in this particular conflict in Sierra Leone. An environmental court could be, in that sense, a welcome enrichment to the pool of international courts, because in addition to the ICJ and the ICC the ICE would handle the relationship between humans the environment. As this human-environment relationship involves potential criminal behaviours, it would be conceivable that the ICE handles these particular crimes as well.

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681 Hockman, above n 662, at 223.
682 At 229.
683 Sands, above n 507, at 4.
6.2.3 **Draft Statutes for the International Court for the Environment**

The ICE Foundation has drafted a concept plan for the potential ICE. The only step missing so far is the political will and an international decision to set up such an environmental court. Article 10 of the ICE Coalition drafts states that an ICE shall “protect the environment as a fundamental human right in the name of the international community.” The idea includes giving a court jurisdiction over any environmental dispute involving state responsibility to the international community and disputes concerning environmental damage, caused by private or public parties, including states, where it is presumed that, due to its size, characteristics and kind, this damage affects interests that are fundamental for safeguarding and protecting the human environment on Earth.

The ICEF Draft Statute is ambitious and clearly indicates a wide perception of environmental harm. Arguably, this wide scope is the very reason the proposal did not get much backing within the international community of states.

Riches and Bruce summarise the five purposes for a potential ICE as followed:

1. clarify and ascertain environmental legal obligations;
2. facilitate harmonisation of and complement existing legislative and judicial systems;
3. provide access to justice to a broad range of actors through open standing rules;
4. provide workable solutions to modern environmental concerns;
5. build trust among international community.

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684 ICE Foundation “Draft articles for an International Court for the Environment” ICE Foundation.
687 Pedersen, above n 487, at 549.
688 Riches and Bruce, above n 259, at 3.
The responsibilities of the court are listed by Hockman:

1. adjudicating significant environmental disputes involving the responsibility of members of the international community;
2. adjudicating disputes between private and public parties with an appreciable magnitude (at the discretion of the president of the court);
3. ordering emergency, injunctive and preventative measures as necessary;
4. mediating and arbitrating environmental disputes;
5. instituting investigations, where necessary, to address environmental problems of international significance.689

Interestingly, international environmental crimes are not even mentioned in the listed purposes or responsibilities. In addition to the listed schemes neither the Draft Statutes of the ICEF nor of the ICE Coalition refer directly to international environmental crimes. Both lists show that the primary task of the ICE is a general one. The ICE shall take over the general supervision of the world’s environment. That means that the purposes and responsibilities of the ICE are defined quite broad to allow the court to engage in lots of different environmental matters.

Hockman further suggests the implementation of a right to a healthy environment into the work of the court.690 This right would offer broad coverage and could ensure access to legal aid through an international court for private parties and NGOs, next to the regular state parties in international law.691 The other main international courts do not allow standing for non-state actors.692 The growing environmental awareness means that the court could be open for various actors, especially non-state actors.693 Bosselmann puts into play the idea of the ICE being able to issue advisory opinions, similar to those that can be

689 Hockman, above n 662, at 223.
690 At 223.
691 At 223.
692 Pedersen, above n 487, at 550.
693 ICE Coalition, above n 366, at 7.
issued by the ICJ.\textsuperscript{694} ICJ advisory opinions usually are quite powerful, because ignoring them would cause an international moral disgrace.\textsuperscript{695} The ICJ’s advisory opinions steer the development of international law and so could the ICE influence the international environmental law regime as well.

6.3 What would be the advantages of a new International Court for the Environment?

The central argument in favour of an ICE is that the world is facing a number of serious environmental problems, and there is a need for international attention and legal interpretation of all international environmental issues. Currently existing international institutions are not equipped to handle these challenges.\textsuperscript{696}

The environmental problematic shifts more and more into the focus of the public and becomes one of the main concerns.\textsuperscript{697} An ICE could sharpen public awareness and add credibility to the international law regime.\textsuperscript{698} In a criminal sense, the ICE could ensure widespread international environmental protection even in nation states, whose domestic courts fail to sanction international environmental crimes.\textsuperscript{699}

The numbers of non-state actors on both sides of environmental crimes – both perpetrators and conservationists trying to protect the environment – are growing.\textsuperscript{700} The outdated practice of banning non-state actors from appearing before international courts goes against wider developments in supranational jurisdiction, which can be proven by the 1998 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) or the procedures in front of the courts of the EU. The Aarhus Convention simplifies the access to environmental information and ensures transparency of public authorities towards the public.

\begin{itemize}
  \item \textsuperscript{694} Bosselmann, above n 145, at 216.
  \item \textsuperscript{695} At 216.
  \item \textsuperscript{696} Pedersen, above n 487, at 548, 550.
  \item \textsuperscript{697} Hockman, above n 662, at 224; ICE Coalition, above n 366, at 4.
  \item \textsuperscript{698} Pedersen, above n 487, at 550.
  \item \textsuperscript{699} Druml, above n 199, at 148.
  \item \textsuperscript{700} Riches and Bruce, above n 259, at 2.
\end{itemize}
in environmental matters.\textsuperscript{701} The constitutive treaties of the European Union allow, for example, domestic courts to refer cases to the European Court of Justice and natural persons to directly sue European authorities for mistreatment before the aforementioned court.\textsuperscript{702} This is why an ICE should be a legal forum for state and non-state parties.\textsuperscript{703} In a criminal case the ICE would need jurisdiction over individuals to prosecute the potential perpetrators. It is also worth considering the provision of access to the ICE for environmental refugees, fleeing because of a destructed environment due to, for example, the effects of climate change or impacts resulting from large-scale environmental crimes. It is often that the people most affected by environmental degradation are the poor and powerless.\textsuperscript{704} Often their national states do not offer sufficient judicial system and despite the potential ICE there is no national or international environmental institution they could turn to. An open ICE could strengthen their rights and would generally be a large step to ensure environmental justice for all.\textsuperscript{705}

6.3.1 Judicialisation

Judicialisation means “the transfer of decision-making rights from legislature, the cabinet or the civil service to the courts”.\textsuperscript{706} Judicialisation is germane to this discussion because if an ICE is established, it would be a court that is only bound to the interests of the international community and not to the legislature or executive of any sovereign state. The judges working at the ICE would deliver a verdict “in the name of humanity” and judicialise violations of primary and conventional norms concerning the environment.\textsuperscript{707}

This socio-legal approach could empower international environmental criminal law to develop out on its own. The ICE could further influence and form

\textsuperscript{702} Consolidated version of the Treaty of the European Union C 326/13 (26 October 2012), art 19(3)(1); Consolidated version of the Treaty of the Functioning of the European Union C 115/47 (13 December 2007), art 265, 267.
\textsuperscript{703} Riches and Bruce, above n 259, at 2; Hockman, above n 662, at 223.
\textsuperscript{704} ICE Coalition, above n 366, at 12.
\textsuperscript{705} ICE Coalition, above n 366, at 12.
\textsuperscript{707} Postiglione, above n 308, at 323.
the sphere of international environmental law. Weak enforcement, lack of legitimacy and slow and lax implementation could be improved.\textsuperscript{708} This would counteract against some of the most criticised points in international law. This development to a centralised and internationalised approach of environmental governance could overcome developments in some countries to draw back on environmental protection. A climate change denier as head of state or a national environmental agency would lose some of its dread.

This form of lawmaking is often demanded by interest groups where political decisions are not in their interest.\textsuperscript{709} Posner sees it even as form of “world government approach without the government”.\textsuperscript{710} Strict environmental governance lastly helps states, businesses and civil society altogether.\textsuperscript{711} While the stylisation of a world government might be a bit over the top, this form has a chance of influencing the faith of humanity from an angle of community instead of limited nation state views. This is especially necessary in environmental matters. As said many times throughout this thesis, international environmental crimes pose a global threat and needs a fast and stringent answer. Task of the ICE is to judge and not to mediate.

6.3.2 Freedom of definition
After Chapter Two has already outlined the dilemma of a definition of international environmental crimes the ICE could come with a solution for this problem. An entirely new court could create a wide and proper definition of international environmental crimes to ensure their proper legal handling without being bound by currently existing restrictive definitions. To tackle international environmental crimes properly it has to be thought about, what is meant by “international”, what is a “crime” against the environment, what is the scope of “environmental” in this regard and how can we combine these terms to an appropriate and precise definition? This freedom of definition could be a unique characteristic and demarcate the ICE from the ICC. Within the ICC a

\textsuperscript{708} Pedersen, above n 487, at 556.
\textsuperscript{711} Riches and Bruce, above n 259, at 3.
potential environmental crime provision would only be possible within the boundaries of the existing definitions of the ICC.

6.3.2.1 What is the opportunity of a new definition in this context?
The sphere of international environmental crimes involves a lot of environmental harm, which could be seen as “criminal”. For an effective approach against these acts it is very important that the international community is on the same page about what actually should be tackled to ensure a consistent approach. A newly set definition offers the chance to implement all the acts causing significant environmental harm as crimes: the wider the definition, the greater the potential environmental benefit of actually having a legal regime for international environmental crimes in place. The creation of a new court could be the perfect environment and starting point to implement this new definition. In the course of the creation of the ICE there would be the most freedom to newly define international environmental crimes. The opportunity that a new definition offers is the chance to empower the ICE with the widest possible competency. In contrast to a greening of the ICC, a new definition within the sphere of the ICE would not be bound and restricted by already existing definitions. The international environmental criminal law regime could start off with a clean slate. Therefore a coherent definition of the term is a prime opportunity to implement strong environmental protection via international criminal law within the ICE.

Definition in general means to create an exact description of the nature, scope and meaning of a term.712 Figuratively speaking that is comparable to storing only specific objects inside a box. Opening the box means there are only these specific gadgets in there. A definition therefore creates a box containing all the aspects of a certain term. Whenever the term is needed, the box can be opened, showing the true meaning of the term.

In case of international environmental crimes the definition has to incorporate the whole complexity of the topic: the wide range of stakeholders involved, the general internationality of environmental crimes, the many drivers of these crimes, the vast impacts on numerous fields, and the entanglement with

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other areas of organised crime. All these different aspects and facets of international environmental crimes have to be taken into account to formulate a definition.713 A wide definition, covering as much environmental harm as possible, comprises the most potential for environmental protection. International environmental crimes should not represent one intrinsic act, but should include a wide range of environmentally harmful activities. Next to international environmental crimes environmental offences should be formulated to cover international situations as well.714 The term international environmental crime has to be kept broad to contain all the different areas of international environmental crimes and allow room for new development in this sector. At the same time, the definition has to be specific enough to ensure international judicial action is possible and a distinction from other crimes can be made. Especially in criminal law a determination between what is lawful and unlawful has to be precise. This definition therefore has to be broad and strict in equal measure. It is vital to find this balance to ensure effectiveness in usage. If the description is too broad, it functions as a gateway for speculation and misuse, if it is too strict it cannot cover the wide topic of international environmental crimes. It has to be kept in mind that each international environmental crime itself has its own definition and that the term refers to an umbrella term encompassing all the acts against the environment deemed to be unlawful.

Returning to the aforementioned example regarding a definition being a box containing all the aspects, the specific acts would be boxes inside this box with their own contents. International environmental crimes are a crucible of all circumventions of environmental legislation and environmental harm in general. Ecocide, as most heinous international environmental crime, would, for example, be a “box within the box”.

Given the complexity and breadth of the topic definitional decisions have to be made very carefully.

713 Lynch and Stretesky, above n 10, at 3.
714 United Nations Economic and Social Council The Role of Criminal Law in the Protection of the Environment, above n 542.
6.3.2.2 How should international environmental crimes be defined under the International Court for the Environment?

Unencumbered by the scope and nature of an existing jurisdiction, a new ICE could be given a new definition of international environmental crimes to work with and apply. To achieve the most for the environment, this definition should be broad but will also need to achieve some compromises between the relevant stakeholders, and not set unrealistically high or low thresholds. It shall draw a line between simply “using” the environment and “criminally” exploiting it. There has to be a strict separation between lawful use of the environment and unlawful destruction. Defining certain environmental harm as a crime shall help to slow down the overall environmental degradation.

Given the fact that international environmental crime consists of three different terms this thesis will firstly point out the meaning of each single component of international environmental crimes independently. However, since the determination of the single parts of “international environmental crimes” can obviously not happen without establishing some form of connection, in the end the three elements will be combined to produce a new definition of the term international environmental crime as a whole.

6.3.2.2.1 Definition of “international”

International environmental crimes are linked to the international community in a special way. The word “international” determines between the application of national law or international law and indicates that in this discussion international law is the focus.

At first sight the definition of the word “international” appears to be quite clear and plain. In general, the term is used to describe the involvement of two or more states in any matter. This is due to the historic usage of the word relating to the regulations of the interactions of states. However, international law does not only create obligations and rules for states, but affects individuals, people, generations, animals and nature itself. Environmental matters especially do not only create disputes between states, they also threaten the

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716 Giagnocavo and Goldstein, above n 391, at 347.
global environment as basis of human life.\textsuperscript{717} A remarkable feature of international environmental crimes is that they offer the chance to go beyond states with the power of public international law. Chapter One has shown, that many of the potential criminal conduct resulting from corporate behaviour and not directly from state actions. This can be seen in the examples of the Bhopal catastrophe, the Bento Rodriguez dam collapse, or the Deepwater Horizon oil spill. Therefore it is of high importance that the definition is not limited to state action, but also includes acts committed through stakeholders, such as international corporations, when determining the scope of international.

The proliferation of the impacts of environmental wrongdoing tends to not be localised. They result in international, even global, impacts with no regards to the actual site of the cause.\textsuperscript{718} In fact, environmental crimes are transboundary crimes by their very nature with global reach, albeit of varying intensity.\textsuperscript{719} Most acts in occurring within the sphere of international environmental crimes cannot be constrained to the soil of the perpetrator.\textsuperscript{720} Even if the act occurs on one state's soil, the impacts are likely to spread across state borders. This is where national law hits a wall.

The focus for the term international must lie in the impacts. It has to be taken into account that some impacts are deferred. This is why the impacts have to be seen in a long-term perspective of the general state of health of Earth. Crimes on the local level can evolve to national, regional and global levels over the years. Environmental harm can move across borders, which can be observed in the international trade in hazardous waste.\textsuperscript{721} Environmental crimes should be awarded the status of international crimes in general, because they affect global human society.\textsuperscript{722} Crimes regarding genocide are always limited to a specific region or specific ethnicities, whereby international environmental crimes affect the whole international community. As Jennings states:\textsuperscript{723}

\textsuperscript{717} Erbguth and Schlacke, above n 182, at 152.
\textsuperscript{718} Banks and others, above n 9, at 3.
\textsuperscript{719} Bergenas and Knight, above n 21, at 120.
\textsuperscript{720} Erbguth and Schlacke, above n 182, at 152.
\textsuperscript{721} Rob White Transnational environmental crime: Toward an eco-global criminology, above n 398, at 14.
\textsuperscript{722} Freeland, above n 124, at 235.
\textsuperscript{723} Sands, above n 418, at 1.
It is a trite observation that environmental problems, although they closely affect municipal laws, are essentially international; and that the main structure of control can therefore be no other than that of international law.

White describes this worldwide interconnectedness as “butterfly effect”: “The fluttering of butterfly wings in the southern hemisphere can translate into hurricane force winds in the northern part of the world”. Every act in one place of the world, without regards to scope or triviality, will have an impact in another part of the world. Local can be global as well as global can be local in the interconnected networks of the world.

Trading in ODS is a prime example in this regard. Trade taking place in one state will lead to the usage of the banned chemicals, which then ultimately enter the atmosphere and unfold their chemical properties attacking the ozone layer. This attack on the ozone layer will not be right above the spot of the trade, but anywhere in the world. The first hole in the ozone layer was discovered in Antarctica, where no ODS-industry or industry at all is located. The Montreal Protocol has clearly addressed the ODS-problem as one of the global community. This example underlines the internationality of the topic. This proliferation of the harm of international environmental crimes from national damage to international mischief can also be observed in the radioactive downfall of the Chernobyl catastrophe.

6.3.2.2.2 Definition of “environmental”

What is meant by the term “environmental” and by the “environment”? There is no fixed definition of “the environment”. It can simply refer to the vicinity, mean the surroundings in which a human being lives or it can be defined as the whole or part of the natural world. However, there is a difference between the human environment and the natural environment. The first refers to cities, villages and human infrastructure. General environmental law on domestic level includes

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725 At 1.
neighbours’ noise or handling of dog mess.\textsuperscript{726} The natural environment is basis of all life on Earth.\textsuperscript{727} It surrounds all living species and provides them with a system which allows life.

The domination of the human race has unfortunately lead to a certain arrogance of humans, when it comes to the environment.\textsuperscript{728} Humans see themselves as a separate entity, because human life is flourishing despite the degradation of the surrounding environment.\textsuperscript{729} This “flourishing” is only possible to a specific turning or tipping point. Figuratively speaking it is like a ship steering into an ice field. As long as the icecap is fragile and not too thick the ship will not have any problems, but after some time even a modern, highly developed icebreaker reaches the point where the ship is not able to continue to break through the ice. It will get stuck or it will sink.

Nevertheless, states see the environment within their borders as their territory where they can do what they want, including any form of degradation. Principle 21 of the 1972 Stockholm Declaration underpins this perception, but it also states that countries should “not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction”.\textsuperscript{730} This view can be compared to private ownership of land. On the one hand the owner has the freedom to use his private land. On the other hand there are certain rules governing what the owner is actually allowed to do and what not to protect neighbours and the community in general. National law forbids certain acts harming small privately owned parts of the environment. Today the no-harm rule can be considered as customary international law.\textsuperscript{731} It becomes clear that states cannot do everything that they want to do. There are certain international rules to obey to prevent injuries in or on the territory of another state or of the properties or persons therein.\textsuperscript{732}

The 1976 ENMOD Convention includes in its article II the following definition of environmental modification techniques: “natural processes, the

\textsuperscript{726} Wellsmith, above n 3, at 127.
\textsuperscript{727} Andrade, above n 29, at 164; Higgins, above n 8, at 61.
\textsuperscript{728} Cormac Cullinan \textit{Wild law: A manifesto for earth justice} (2nd ed, Green Books, Cambridge, 2003) at 44.
\textsuperscript{729} At 44.
\textsuperscript{731} Vinuales, above n 499, at 237, 253.
\textsuperscript{732} Trial Smelter Arbitration, above n 305, at 1963.
dynamics, composition or structure of Earth, including its biota, lithosphere and atmosphere or of outer space”. This shows the broadness of the term “environmental”. It includes outer space, the atmosphere, Antarctica, the high seas, but it does not state that the environment is a precondition of human society. In the Draft Articles for an ICE the ICE Coalition describes the environment as the “common preserve of mankind”. And that is basically what it is: the natural human habitat.

The term “environment” is not limited to a natural approach. The destruction of the environment through international environmental crimes also comprises “cultural ecocide” especially on indigenous nations.

6.3.2.2.3 Definition of “crime”
What is a “crime” and what is an “international crime”? These questions have been on the agenda of criminologists for a long time. As the topic “crime” itself is such a wide subject, the primary direction of this thesis has to be kept in mind. In the scope of this thesis the more precise question is: “What is an “international crime in relation to the environment”?

6.3.2.2.3.1 Crime and international crime
A crime is definitely something that has to be handled carefully, especially when newly criminalising previously non-criminal conduct is at stake. A crime is described in different ways. Broadly, a crime is a “socially harmful act or omission that breaches the values protected by a stated and represents an “event prohibited by law, one which can be followed by prosecution in criminal proceedings and, thereafter, by punishment on conviction”. In contrast to this, the German Criminal Code defines crimes in § 121 StGB as “illegal acts which are imposing a minimum of a one year prison sentence”. The central player in a

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733 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, above n 583, art 2.
735 Tim Boekhout van Solinge "Deforestation Crimes and Conflicts in the Amazon" (2010) 18(4) Critical Criminology 263 at 264.
crime is the state.\textsuperscript{737} The understanding of a crime developed throughout history and contains cultural reasons, social developments, moral thoughts, public opinions and the general understanding that committing a crime is something wrong.\textsuperscript{738}

When a border-crossing element comes into play and more jurisdictions are involved with the criminal act, a clear conviction becomes more challenging.\textsuperscript{739} The Rome Statute, however, constitutes in its article 5(1)(a)-(d) the major international crimes: genocide, crimes against humanity, war crimes and the crime of aggression. However, the general understanding of international crimes is wider. It includes all violations of criminal norms derived out of an international agreement or customary law and encompasses, for example, drug trafficking or human trafficking. International criminal law encompasses inherently all norms which directly justify, preclude or regulate culpability in any way.

6.3.2.2.3.2 Victims of international environmental crimes
The consideration of the victims of international environmental crimes is important to get a full picture. Clearly, environmental crime cannot easily be compared to “normal” street crime. Unlike classic crimes, environmental crimes comprise, for example, industrial pollution, corporate criminality and the impact and legacy of military operations on landscapes, water supply and air quality.\textsuperscript{740} A feature of environmental crimes is the dual victimisation of people and of the environment.\textsuperscript{741} Sometimes the human and natural population of an entire region is affected by an international environmental crime and at times even confronted with irreversible effects. Classic street crime is usually limited to only one victim or at least a limited group of people.\textsuperscript{742} This perspective leaves the social impact of crimes out, but both street crimes and environmental crimes comprise this social influence in equal shares.

\textsuperscript{737} White \textit{Transnational environmental crime: Toward and eco-global criminology}, above n 398, at 4.
\textsuperscript{738} Marchuk, above n 369, at 69.
\textsuperscript{739} At 69.
\textsuperscript{740} Higgins, Short and South, above n 372, at 251.
\textsuperscript{741} Situ and Emmons, above n 53, at 4.
\textsuperscript{742} At 4.
Another point of view sees international environmental crimes as frequently victimless.\footnote{Bricknell, above n 454, at 2.} There cannot be a crime without a victim. Even if victims are aware of environmental harms, crimes go unreported, because those affected do not consider themselves as direct victims or even as victims at all.\footnote{Barclay and Bartel, above n 454, at 189.} The fact that, next to humans, non-human entities can be considered as victims is one of the reasons that governments, enforcement agencies and criminal law in general struggle with appropriate responses to international environmental crimes.\footnote{At 189.}

Opposite of the victim there is the perpetrator. Environmental offenders can be ranked as criminals. At first sight it might seem strange to see someone harming the environment as on a par with a mass murderer, but the scale of international environmental crimes requires a different conclusion.

6.3.2.2.3.3 \textbf{Actus Reus}

The principle of personal culpability says that punishment is always directed onto personal guilt.\footnote{Werle, above n 532, at 116.} It is not suitable to work with punishment for the masses.\footnote{At 116.} Each individual has to bear the responsibility for their own actions themselves. As a crime is always a mix of objective and subjective elements, there needs to be conduct and a form of intent, recklessness or negligence.

The question which should be raised in this regard is, whether the actus reus of environmental crimes refers to the harm of the environment, humans or both? Crime also defines itself by a specific seriousness of harm to differ from offences.\footnote{White \textit{Transnational environmental crime: Toward and eco-global criminology}, above n 398, at 5.} The aforementioned distinction between a strict legalist and a socio-legal approach comes into play here. Is the conduct of violating existing international legal rules regarding of international environmental law a crime, or is it the harm done itself? The strict legalist approach seems an “easy” and straightforward way of defining something as an international environmental crime, and from a criminologists’ point of view the strict legalist theory seems
appealing on the first sight. Crime is whatever the criminal law defines it as.\textsuperscript{749} Thus crime is a behaviour prohibited by some sort of criminal code and a criminal would be the person behind this behaviour.\textsuperscript{750} Most of the usual definitions of “crime” tend to follow this approach. This basically means, if a treaty or any other international obligation forbids a specific act or sets out rules for a certain type of conduct in environmental matters, and someone contravenes the stated prohibition or rules, this results in committing a crime. In contrast to this strict concept the socio-legal approach centres on morality and values. This theory focuses on the actual harm done to the environment. White points out, in this regard, that transnational environmental harm constitutes a crime.\textsuperscript{751} Human behaviour, no matter if collective or individual, is in general considered as a major source of environmental harm.\textsuperscript{752} Not all acts “contravening environmental protection or offending notions of green mortality are crimes”, as Nurse states.\textsuperscript{753} The harm done, for example, by illegally cutting down a single tree is negligible, but environmental crimes occur on a massive scale and are usually done by big and well-organised transnational syndicates, corporations, states or terror networks. To differentiate between harmful and harmless acts a definition is necessary. The potential of environmental harms is much higher than criminal impact on individual victims.\textsuperscript{754} Serious environmental damage which is not part of an international treaty should still be treated as an international environmental crime.

6.3.2.2.3.4 \textbf{Mens rea}

A definition of a crime has to encompass both the element of actus reus and the element of mens rea. Mens rea ranges from intended, through reckless, to negligent.\textsuperscript{755} The question is which intensity of mens rea is appropriate for

\textsuperscript{749} Situ and Emmons, above n 53, at 2.
\textsuperscript{750} At 2.
\textsuperscript{751} White \textit{Transnational environmental crime: Toward and eco-global criminology}, above n 398, at 1.
\textsuperscript{752} Angus Nurse “Linking the green and the mainstream” in Angus Nurse (ed) \textit{Critical Perspective on Green Criminology} (Internet Journal of Criminology, 2014) at 109.
\textsuperscript{753} Nurse “Introduction”, above n 223, at 6.
\textsuperscript{754} At 3.
international environmental crimes?\textsuperscript{756} It would be quite a difficult task to prove the requirement of intention in relation to international environmental crimes.\textsuperscript{757} As mentioned above, one of the main problems of article 8(2)(b)(iv) of the Rome Statute is the incredibly high mens rea, which is almost impossible to prove. Claiming misunderstanding of the provision could already be enough for exculpation.\textsuperscript{758}

It is common knowledge that acts intervening in nature cause environmental harm. Any serious damage of the natural environment done by humans constitutes a breach of duty of care and this breach consists in tortious conduct, when attempted with intention, recklessness or negligence.\textsuperscript{759} Besides this, environmental crimes are linked with other forms of serious international crimes including organised criminal movements.\textsuperscript{760} Therefore international environmental crimes should get a wide mens rea, including intention, recklessness and negligence.

6.3.2.2.3.5 Ecocentrism as anchor
As outlined above the anthropocentric approach centering solely on the human race is not expedient. It is simply not effective in such a complex topic to focus on one aspect, respectively on one species, and it does not describe ecological reality and biodiversity.\textsuperscript{761} Biocentrism, which prioritises the environment, is the contrary extreme, centering not on humans, but on the environment.\textsuperscript{762} Ecocentrism sees humans as a part of one big interacting ecosystem.\textsuperscript{763} International environmental criminal law shall do its share on the way to a healthy environment as habitat for humans. Normally environmental entities do not posses their own rights and they cannot be legally harmed through environmental damage.\textsuperscript{764} In the last decades the legal status of the environment is growing exponentially, as seen, for example, in the 2015 Paris Agreement on

\textsuperscript{756}Marchuk, above n 369, at 69; Werle, above n 532, at 116.
\textsuperscript{757}Drumbl, above n 199, at 143.
\textsuperscript{758}Lawrence and Heller, above n 339, at 79.
\textsuperscript{759}Drumbl, above n 199, at 143.
\textsuperscript{760}Nurse, above n 223, at 3.
\textsuperscript{761}Birnie and Boyle, above n 237, at 257.
\textsuperscript{762}Kloepfer and Heger, above n 467, at 18.
\textsuperscript{763}White, above n 440.
\textsuperscript{764}Kloepfer and Heger, above n 467, at 18.
Climate Change, which clearly states the coherences between ecology and humans. There is simply no reason why significant environmental harms should be excluded from any criminological system.\textsuperscript{765}

6.3.2.2.4 Definition of “international environmental crimes”
As seen above, the words “international”, “environmental” and “crime” each have a meaning and a definition of their own. Henceforth it is time to combine the outcome of the three elements to form a specific definition for “international environmental crime”. This newly crafted definition shall ensure that the jurisdiction of the ICE covers as many environmental harmful acts as possible. Through this new definition of international environmental crimes the ICE would be independent from existing limitations on that matter: the ICE would not be bound by other treaties or other jurisdiction. The ICE could rather start off with a clean slate and implement its own legal interpretations. Thus, the ICE could have the greatest influence in environmental criminal matters on international level and develop into a significant institution within the whole international law regime.

The Rome Statute defines its crimes primarily through listing more or less specific acts committed under particular circumstances. This limits the scope of the Rome Statute crimes to these listed specific acts and often hinders further development of the provisions of the Rome Statute. Therefore the definition needs to be a broader one at this stage. This would help the court to establish a strong standing within international jurisdiction. Of course, this “raw” definition needs further specification to lead to a clear prosecution. The elements of crime of the Rome Statute could be an example, how this specification could be achieved.\textsuperscript{766} Also this “raw” definition enables the court to establish its own boundaries and limitations in the course of its development and its judgements.

\textsuperscript{765} Lynch and Stretesky, above n 10, at 3.  
\textsuperscript{766} Cf. Rome Statute, above n 421, art 9.
As a result of the aforesaid, international environmental crimes shall be defined as:

An international environmental crime is an intended, reckless or negligent precipitated act causing harm or potential harm with potential international significance for nature as basis of life for mankind and all other species on Earth affecting the human community across state borders.

This definition eschews a referral to existing international agreements to allow the ICE to focus on environmental harm as the main fact and encompasses eventually all parts of the term "international environmental law".

The first part introduces the criminal facet and clarifies that environmental harm as well as only potential harm is subject to criminal investigation. It furthermore implies that not only intended, but also reckless and negligent acts can be considered as international environmental crime. The middle part imports the environmental aspect and clarifies that the environment is a vital part for human existence. It has to be preserved for the sake of the environment itself and to ensure an appropriate human life within this environment. This middle part also introduces a threshold to the definition. Only environmental harm with potential international significance is to be considered an international environmental crime. The third part refers to the internationality and vast scope of international environmental crimes. The link to the human community recognises that humans do suffer when their environment is harmed in any way. As mentioned above this definition is on the one hand broad to honour the value as collective term, but on the other hand specific enough to target environmental crimes directly.

In the light of a newly founded ICE this wide definition could help to ensure that the problem of international environmental crimes can be properly addressed on international level.
6.4 What would be the challenges of establishing a new International Court for the Environment?

Despite the opportunity it represents, an ICE is still highly controversial.767 A frequently raised question is: why should there be a case for an ICE, when there was never one for the ICJ chamber for environmental matters? It can be argued that in today's time the environment receives more and more attention and that therefore the possibility of environmental cases is growing. However, this history of no referrals reduces the chances of a strong standing for an ICE.768 States are in general hesitant about referring international environmental disputes to international adjudication.769 Another example for this reluctance can be seen in the work of the International Court of Environmental Arbitration and Conciliation (ICEAC), which was set up in 1994 in Mexico by several lawyers.770 It was set up to hold court over all environmental disputes, but no state has ever accepted a petition for conciliation.771

As a matter of fact, it is often difficult for existing international courts to distinguish between the international law regimes primarily governing a case. The Gabcikovo-Nagymaros Case and the Pulp Mills Case can, in this regard, be used as an argument against an ICE, because the crucial point of these cases were treaty obligations, which fall within the scope of the ICJ.772 Even in the “old” or “classic” examples for environmental cases in front of international judicial organs, such as the Pacific Fur Seal Arbitration in 1893, Trail Smelter Arbitration in 1941 or Lac Lanoux Case in 1941, primarily show a conflict between economic and ecological interests.773 A solely environmental case is difficult to imagine, which is due to the explained complexity of international environmental crimes and international environmental issues in general.

To ensure a controlled environment for the international courts there have to be strict boundaries between their areas of responsibility. This clear

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767 Pedersen, above n 487, at 552.
768 At 553.
769 Sands, above n 507, at 4.
770 Eckard Rehbinder and Demetrio Loperena "Legal Protection of Environmental Rights: The Role and Experience of the International Court of Environmental Arbitration and Conciliation" (2001) 31 Environmental Policy and Law 280 at 282; Pedersen, above n 487, at 552.
771 Rehbinder and Loperena, above n 769, at 282.
772 Pedersen, above n 487, at 551.
773 Sands, above n 507, at 3.
distinction between the courts can be found in domestic legal systems, where, for example, criminal courts, civil courts and administrative courts handle their specific field of law. The ICJ handles general questions of international law and the ICC solves the criminal cases. An ICE handling parts of both could likely lead to competence problems. The approach of creating a new jurisdiction for every new issue in international law cannot be a way for the future. This landscape of numerous courts brings competence and jurisdictional problems due to overlapping jurisdiction, which is simply not necessary. International legal governance needs consistent and strong institutions and not a confusing amount of entities all dealing with different issues. This slows down legal development on the international level and blocks effective solution building. This also applies to the creation of several regional ICES. Regional institutions might be a little bit closer to the problem, but this response would surely cause overlap problems.

Another problem for an ICE is the fact that there is no common international agenda on how to deal with the environment within the state community yet. There are big differences between the states, especially between developed states and non-developed countries. But also developed states have differing opinions on environmental topics, as seen in the controversial discussion between the US and Germany regarding genetic engineering or climate change.

Next to all the political, financial and legal questions even the mundane debate about the location of the new International Court for the Environment raises difficult issues. The UN has offices around the world, UNEP headquarters are based in Nairobi and the existing “world-courts” are located in The Hague. A connection between the ICE, the ICJ and the ICC in The Hague would seem like the easiest way. The Hague is already the “world’s capital of international courts” and provides the needed infrastructure. But to locate the ICE in countries with a high percentage of environmental challenges in general would create an even stronger sign. Placing an internationally respected court in a developing country is a risk, but one with a statement. It would send a clear

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774 At 4.
775 At 4.
776 At 4; Faz “Trump verkündet Amerikas Rückzug aus Klimaabkommen” (01 June 2017) Frankfurter Allgemeine Zeitung <www.faz.de>.
message that “the global community is no longer willing to tolerate international environmental crime and degradation” to those who are involved in criminal actions around the world’s precious environment.

Funding of the ICE presents another political issue. Riches and Bruce suggest an approach to funding by either state parties or by fees issued by the court.\textsuperscript{777} As a third option Riches and Bruce suggest financing by corporations in form of long-term contributions in return for access to the international institution.\textsuperscript{778} All three options are accompanied by hurdles. Funding through states may deter states from signing the agreement in the first place and fees associated with submitting a case may be unattractive to parties due to the potential costs. Grants by corporations may threaten the ICE’s integrity and independence of the court.

Aside from the issues within the financing scheme, negotiations for an environmental court on the international level would be a challenging task, given the current global political tensions and disagreements, particularly regarding environmental matters.

### 6.5 Conclusion

No doubt, the ICE could play a vital role in the future of international law. There is simply no major international court with a deep enough knowledge and specialisation yet in existence.\textsuperscript{779}

The advantages of an ICE include a centralised system for a number of stakeholders, the freedom of definition, enhancement of the body of law regarding international environmental issues, newly grown consistency in judicial resolutions of international environmental disputes, increased focus on preventative measures, global environmental standards of care and stricter enforcement of international environmental treaties.\textsuperscript{780} Some say that only an ICE-like institution can effectively address global issues and disputes in the environmental sphere.\textsuperscript{781} In the light of the aforesaid the ICE has the general

\textsuperscript{777} Riches and Bruce, above n 259, at 4.
\textsuperscript{778} At 4.
\textsuperscript{779} ICE Coalition, above n 366, at 8; Riches and Bruce, above n 259, at 2.
\textsuperscript{780} Hockman, above n 662, at 223-224.
\textsuperscript{781} McCallion and Sharma, above n 249, at 365.
potential to be the right forum for international environmental crimes, even with the ICC in existence. In addition to the existing international jurisprudence an ICE could blend in to uphold the concerns of the environment. However, the disadvantages have to be kept in mind.

A weakened version of an ICE has definitely chances of being born, but it might then be another addendum to the generally weak international enforcement in environmental issues. To simplify the introduction of an ICE, a first step might be the introduction of an ad hoc tribunal. This could be a cornerstone of the future ICE and provide declaratory clarification and adjudication, and a general dispute resolution forum for urgent matters for those who submit to its jurisdiction. A new international environmental crime convention with an ad hoc court and the possibility of a later permanent court might be the easier way than setting up a fully functional international court.

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783 Hockman, above n 662, at 226; Riches and Bruce, above n 259, at 5.
784 Hockman, above n 662, at 226.
785 Druml, above n 199, at 147.
Chapter Seven

The World Environment Organisation

Why is a World Environment Organisation desirable in the context of international environmental crimes?

7.1 Introduction
The rise of environmental concerns in international law within recent decades resulted in demands for a more structured system in governing international relations in environmental matters, be it in the form of a new World Environmental Organisation (WEO), a United Nations Trusteeship Council, a United Nations Environment Programme with increased powers, or a World Climate Authority. It is not only scholars who have suggested the need for such reforms or new supranational institutions. As early as 1997, leaders of economically powerful countries have spoken in favour of a WEO: 20 years ago, Germany, backed by some other states, formally proposed the creation of a global umbrella organisation for environmental issues.

Given the global importance of the environment and the challenges arising in this area, it is astonishing that no WEO yet exists. During the preparation of the UN climate summit in Copenhagen 2009, Angela Merkel, chancellor of Germany, and Nicolas Sarkozy, president of France, wrote a letter to the UN Secretary General calling for the creation of a WEO. How could an institution like this be advantageous in the fight against international environmental crimes?

786 Bosselmann, above n 145, at 257.
788 ICE Coalition, above n 366, at 7.
7.2 What could a World Environmental Organisation look like?

7.2.1 UNEP as base of the new World Environment Organisation
Since 1972, UNEP has been the leading environmental arm of the UN. UNEP was established as a permanent forum, with the intent that UNEP monitors environmental trends, convenes meetings and conferences and takes part in negotiations for international agreements, but UNEP was not endowed with any substantive decision-making or enforcement power.\(^{789}\) The expertise and experience regarding international environmental issues is therefore already extant within the UN. UNEP could be converted into a more powerful organisation under the banner of the United Nations.\(^{790}\) A WEO, as a successor institution to UNEP, could – with very little disruption to the overall UN system – be placed alongside the other specialised agencies of the overall UN Organisations.

7.2.2 Unique characteristic of the World Environment Organisation
All of the different suggestions for an international environmental organisation contain within them a common core goal: the establishment of an institution governing the Earth's environment on a supranational scale. Therefore, a WEO is not necessarily superior to the other proposals.\(^{791}\) However, one advantage of a WEO is that it would be likely to cover all necessary facets of environmental oversight, as opposed to only being responsible for one specific aspect within the international environmental law regime.

Currently, the international environmental law regime is quite decentralised, with a number of different organisations and secretariats, which unhelpful in facilitating effective and consistent environmental protection.\(^{792}\) There are a number of UN and non-UN organisations, each of which deals only with a small part of the overall international environment.\(^{793}\) This development of creating smaller institutions for separate specific aspects continues apace. For

\(^{789}\) Soroos, above n 48, at 1.
\(^{790}\) Bosselmann, above n 145, at 259.
\(^{792}\) ICE Coalition, above n 366, at 7.
\(^{793}\) e.g. United Nations Convention to Combat Desertification (UNCCD).
example, during a recent Berlin meeting of the ministers of the environment from G 20 states, a “resource partnership” was discussed, with the intention of creating an information- and coordination platform for the planet’s resources.\textsuperscript{794} In the light of the fact that the world’s resources are under extreme pressure, this is surely a productive idea. However, to take on all environmental challenges, including international environmental crimes, it would be desirable for reasons of consistency and efficiency to have a single umbrella institution that could be a “one stop shop” for all environment issues.\textsuperscript{795} Giving a single entity such powers on a national scale recently lead to success within the aforementioned PPCDAM operation in Brazil, where national entities of different levels were effectively coordinated into a central organisation.\textsuperscript{796}

To ensure effectiveness, regional offices of the WEO could be established for a better oversight of complex regional structures, following the example already established in UNEP. The creation of an independent WEO would send a strong signal to all that addressing environmental issues as a common global problem. This is why a comprehensive approach in the form of the creation of a WEO would be preferable to other smaller scaled solutions.

7.2.3 Tasks of the World Environment Organisation

After its creation a WEO could henceforth deal with all international environmental matters assigned to the organisation. The role suggested here is comparable to a form of guardianship of the global commons, which links the idea of a Trusteeship with the idea of a WEO.\textsuperscript{797} As a supranational umbrella organisation, the WEO could integrate all of the already existing international organisations related to environmental protection under one roof, which would boost coordination and, cooperation, as well as provide means to organise international enforcement of the regulations already in place in order to hold state and non-state actors accountable.\textsuperscript{798} The WEO could potentially be the organisation where all environmental strings converge. The Environmental

\textsuperscript{794} Wetzel, above n 373.
\textsuperscript{795} Himbert, above n 6, at 21.
\textsuperscript{796} Nelleman and others, above n 3, at 12.
\textsuperscript{797} Bosselmann, above n 145, at 260, 261.
\textsuperscript{798} ICE Coalition, above n 366, at 7, 8.
Protection Agency in the US is a national example of the nature of the type of organisation the WEO would be on the international stage. As seen in the Volkswagen manipulation scandal, the powers of the EPA lead to the near-toppling of a major corporation.

Components of the WEO’s functions could be the supervision of sustainable development; general monitoring of the environment; collecting scientific information and intelligence; reviewing of environmental policies; preventing Hardin’s “tragedy of the commons”; future planning; impact assessment; and a general oversight of the environment. A WEO could also uphold the human right to a healthy environment. The organisation could emerge into a forum for scientists to raise environmental concerns, entrepreneurs to submit in their ideas, and a locale for liaising between governments and environmental organisations.

Furthermore, state collaboration via an international body could result in a much more rapid reaction time in urgent environmental situations as compared to any other intergovernmental organisation or international court. The WEO would develop to have more expertise and experience than state entities and therefore would be more effective in pressing and managing environmental issues. In international environmental law, direct negotiations between the stakeholders involved are often very difficult and occasionally frustrating, especially when it comes to matters of strict liability and enforcement. These facts have been perfectly on display during the tough, decades-long negotiations regarding the international climate change agreements. Intergovernmental collaboration through a centralised organisation can help simplify these tortuous negotiations and enable the international community to react faster, more accurately, more effectively and more in accordance with an agreed-to consensus. A WEO could put other issues aside and would not act in the interest of states, but in the interest of the environment:

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799 Postiglione, above n 308, at 327.
800 Hockman, above n 662, at 222.
801 Drumbl, above n 199, at 148.
ultimately it would be acting in the interest of the whole human community.\textsuperscript{802} It could avoid becoming a puppet of a select number of influential states.

The current approaches at an international level are one of the four types: multiple states vs. one or more states; state v State; human v State; and human v Human. However, a WEO could go further by acknowledging and strengthening the role of nature in international relations and act as a representative for biotic rights and future generations living in a certain environment. The international treaties protecting the environment do not acknowledge these biotic rights: rather they keep human interests paramount.\textsuperscript{803} Even if there is no such legal concept as rights that exist for animals, plants, nature or future generations, there are at least specific duties or moral obligations to consider their interests, which could be effectively accomplished by a WEO.\textsuperscript{804}

From a criminal point of view a WEO could not only offer investigations, but could also offer a way around the problem that there often is no plaintiff who can clearly prove injury and legal standing in front of an international court. The WEO could take up this role as a general representative for victims of environmental harm and the environment.\textsuperscript{805}

7.2.4 Dispute Settlement Body within the World Environment Organisation

The WEO could also follow the example of the WTO and offer internal dispute resolution methods for its parties.\textsuperscript{806} The power to resolve environmental disputes is of major importance and the lack of this power has hampered the advancement of an international response to many ecological issues, because there is no fixed accountability for states breaching their legal obligations.\textsuperscript{807}

\textsuperscript{802} Bosselmann, above n 145, at 260.
\textsuperscript{803} Feinberg, above n 241, at 243.
\textsuperscript{804} James A Nash "The Case for Biotic Rights" in Steve Vanderheiden (ed) \textit{Environmental Rights} (Ashgate, Farnham, 2012) at 269; Feinberg, above n 241, at 243, 262.
\textsuperscript{805} Bosselmann, above n 145, at 261.
\textsuperscript{806} Hockman, above n 662, at 260.
\textsuperscript{807} Bosselmann, above n 145, at 260.
Within the WTO regime, the dispute settling element is of key importance.\textsuperscript{808} The WTO system is based on the sovereignty of the member states and is bestowed with its power through contractual arrangements between the states.\textsuperscript{809} If a member state violates a WTO rule which results in negative effects accruing to another state party the affected member can withdraw the equivalent value of commitments in order to rebalance the economic relationship.\textsuperscript{810} The dispute settlement bodies – including panels or appellate bodies - only decide on whether one state party has acted outside of its obligations and if the other member state is entitled to react.\textsuperscript{811}

The WTO system is not perfect and lacks some crucial aspects, some of these include issues of lack of transparency; resistance to involvement of civil society; or the fact that developing states are not able to present complex legal briefs in the same way the more wealthy states are able to do.\textsuperscript{812} Further, imprisonment or even the issuance of fines is not within the power of the WTO.\textsuperscript{813} Compliance with the WTO rules can be achieved only from will to do so from the sovereign member states themselves.\textsuperscript{814} It is a system that works solely on the fact that the member states act in their own economic self interests by instituting common compliance of the WTO rules.\textsuperscript{815}

A similar form of dispute settlement mechanism would be definitely beneficial for a WEO to ensure compliance with its rules. However, international environmental law - and especially international environmental crime - requires a stricter and more powerful settlement body. This is why the idea of “voluntary” jurisdiction within an international organisation would be far from sufficient in handling serious crimes. Nevertheless, the idea of a dispute settlement body within the WEO should be an option in regards to minor

\textsuperscript{808} Rufus Yerxa “The power of the WTO dispute settlement system” in Rufus Yerxa and Bruce Wilson (ed) Key Issues in WTO Dispute Settlement - The First Ten Years (Cambridge University Press, Cambridge, 2005) at 3.
\textsuperscript{809} Yerxa, above n 807, at 4; World Trade Organisation “Understanding the WTO: Settling Disputes - A Unique Contribution” WTO <www.wto.org>.
\textsuperscript{810} Yerxa, above n 807, at 4.
\textsuperscript{811} At 4.
\textsuperscript{812} Brack, above n 481, at 7.
\textsuperscript{813} Yerxa, above n 807, at 3.
\textsuperscript{814} At 3.
\textsuperscript{815} At 4.
offences or treaty interpretation, but it is not a practical solution for addressing serious international environmental crimes.

7.3 How would a World Environment Organisation be a useful addition to the jurisdiction for international environmental crimes?

Isolated from the question of whether the ICE or the ICC is the best jurisdictional forum for environmental crimes, the WEO would be one of the first contact points for combatting such crimes. A WEO could play a vital role as an initial platform, an investigator, and an accuser. As the central UN environmental umbrella organisation, the WEO would be one of the first contact points for international environmental criminal issues. Gathering information, launching investigations and bring cases to the attention of the relevant court would be the tasks here, as well as developing, coordinating and steering projects aimed at tackling international environmental crimes. A WEO could add to the current initiating procedures of the ICC (or the potential ICE) and ensure that an inquiry would commence, when other partisan parties would not want to do so. Currently article 15 of the Rome Statute allows the prosecutor of the ICC to receive information about an alleged crime from any source. A WEO could emerge to a principal legitimate source and contact point for the ICC prosecutor in learning information about alleged crimes involving the environment.

In this context, INTERPOL could work as an enforcement agency for specific environmental issues. Enforcement is a crucial point: Freeland points out that in order for the law to have any practical force, there must be appropriate enforcement measures for environmental destruction in armed conflict. This need applies just as strongly to criminal responsibility for environmental harm outside of armed conflict, because serious threats posed to the environment arise not only during wartime. As discussed above, failure of environmental protection often occurs because of lack of enforcement. The WEO would need to be bestowed with some degree of initial enforcement power to ensure that grave environmental concerns are presented before an international

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816 Rome Statute, above n 421, art 15.
817 Freeland, above n 14, at 115.
court, which could then assume the judicial portion of international environmental criminal law.

7.4 Why is there a need for a World Environment Organisation?

The mere fact that the environment is of such global importance transforms the WEO into an all but inevitable institution. The shift from purely state-based international environmental governance to Earth itself becoming the centre of environmental governance has been characterised as not one of choice, but one of necessity.818 The need to gather and address problems as a group is a natural companion to globalisation and internationalisation. When it results in consensus, working together is typically more effective than trying to solve problems alone. Admittedly, working together is not always the easiest option, but it is usually the most effective one. In this context, that would mean combining power, expertise and ideas inside the WEO as an international forum. UN institutions strengthen the confidence in common international entities and the UN and international law themselves.

Environmental institutions have typically been based on the lowest common denominator: UNEP instead of WEO; negotiations instead of trusteeship; and declarations of intent instead of binding law.819 At this stage, only a few states would be willing to agree to supranational environmental governance.820 However, initial refusal and resistance does not make the idea go away. The WEO is simply inevitable and its creation is only a question of time; that time will come when there emerges a strong enough alliance of prescient states to set up such an organisation. This alliance could, for example, be triggered by future significant environmental catastrophes or clear and consistent evidence of worsening weather events. A change in generational leadership could also lead to put the idea of a WEO back on the agenda within the international community.

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818 Bosselman, above n 145, at 268.
819 At 268.
820 At 268.
7.5 Potential hurdles in the creation of a World Environment Organisation

So far, there has never been a consensus or enough support for a reform that would lead to establishing a WEO.\textsuperscript{821} The creation of UNEP was a compromise after lengthy negotiations.\textsuperscript{822} Bilateral and multilateral negotiations often pose tough challenges between the participating states: There are lots of political declarations, but no binding law; there is talk, but no real action.\textsuperscript{823} The establishment of a WEO would cause political controversy and would probably be opposed by the world’s most powerful states.\textsuperscript{824} Developing countries would also hesitate to swallow the bitter pill and relinquish their full potential for industrial development. Principle 7 of the 1992 Rio Declaration contains the concept of “common but differentiated responsibility”, which is intended to compensate for the unfairness in requiring developing countries to obey international environmental rules which may hinder their economic growth in a fashion that would not affect developed nations.\textsuperscript{825} In general states do not want to lose aspects of their sovereignty and struggle with the acceptance of supranational rules.\textsuperscript{826}

Another reason for tension is the question of funding such an organisation. UNEP is funded through the general budget of the UN, the Environment Fund and other trust funds.\textsuperscript{827} As the WEO could act as the successor organisation of UNEP, the current funding scheme could be transferred and continued. However, more responsibilities and tasks for a WEO would require an increased budget, which would necessitate further negotiations and new solutions.

\textsuperscript{821} At 268.\textsuperscript{822} At 268.\textsuperscript{823} At 268.\textsuperscript{824} At 263.\textsuperscript{825} Rio Declaration on Environment and Development, above n 439, principle 7; Fajardo del Castillo, above n 190, at 12.\textsuperscript{826} Bosselmann, above n 145, at 268.\textsuperscript{827} Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety “UNEP” (2016) <www.bmub.bund.de>.
7.6 Conclusion

Today’s nations have to acknowledge the fact that teaming to work with other states is more effective and advantageous than a solo run, especially in environmental matters. The examples of the WTO and the Montreal Protocol illustrate that the creation of an effective and groundbreaking international institution or agreement cannot be prevented by the opposing position of some influential states.828

Bosselmann does not see obstacles that will inevitably stop the creation of a WEO.829 He also relies on the political will of the states and argues that in the long run, a sustainable development with careful environmental handling through international agencies is indispensable.830 Otherwise, there will be only losers and no winners.831 The parties to the WTO or the member states of the EU accept losses to their sovereignty to ensure international and national progress.832

This need for more effective forms of collective decision making and enforcement triggers the chance for more environmental collaboration.833 Therefore, Postiglione and Bosselmann go so far as to suggest that it would be wrong to not set up a WEO.834 Similar to the ICE, the WEO could play a vital role in the future of international law and especially with the tasks in relation to environmental crimes.

828 Bosselmann, above n 145, at 263.
829 At 267.
830 At 267.
831 At 267.
832 At 268.
833 At 268.
834 Postiglione, above n 308, at 327; Bosselmann, above n 145, at 268.
Chapter Eight

Conclusion

What is the most preferable and suitable solution in combatting international environmental crimes via jurisdictional institutions?

8.1 The options for combatting international environmental crimes in the future

The challenges the global community is facing in environmental matters have to be dealt with in an adequate matter through an adequate forum. The only way to achieve effective environmental justice is a functioning system of monitoring and enforcement, which requires strict laws, applied through cooperation of an international organisation and an international court. Therefore, the creation or further empowerment of international bodies is inevitable. The community of states needs to accept the fact that international collaboration is urgently needed to give a strong and coordinated answer to those individuals participating in destroying Earth’s environment to the cost of future generations. This shift from a states-centric to an Earth-centric approach to governance is not really one of choice, but one of necessity.835 This necessity extends to the need to address international environmental crimes.

After examining existing institutions that could be tasked with handling international environmental crimes, it is evident that there are also a number of possibilities for future developments. One conclusion is clear: some action must be taken. The most dangerous result would be to do nothing and let international environmental crimes continue to thrive. Undertaking a massive project like this could furthermore distract the states from disagreements in other areas and bind them closer together for purposes and international comity.

The ICJ, as guardian institution for general international law, should be disqualified for this task, due to its structural limitations and focus on general

835 Bosselmann, above n 145, at 268.
international law. This leaves two options. Option A would be the foundation of the ICE, which would be able to prosecute international environmental crimes. Option B would be a general “greening” of the existing courts: sensitise the ICJ on environmental matters and reform the ICC from within. Both Option A and Option B should be accompanied by the creation of a WEO. The WEO would be of more importance for Option B in working with the ICC, because the more generalist court would need more environmental assistance throughout cases regarding international environmental crimes.

8.2 Preferable solution to fight international environmental crimes via legal means on international level

The question whether an ICE or a reformed ICC is the best option for international environmental crimes is controversial. Both discussed options, the foundation of an ICE or the reform of the ICC, offer arguments in favour and against. There are many considerations to put in the balance. What is now the right forum to address international environmental law?

A number of experts see the ICE as urgently needed. Under option A, the ICE could become a symbol for environmental stewardship and mark a new era in international environmental cooperation. This project has the power to push the whole international environmental law regime to a new level and strengthen environmental protection. A court open for international environmental issues could then accelerate the detection of other international environmental crimes as its experience and the volume of its precedents grow. The simultaneous foundation of a WEO and an ICE would lead to both institutions becoming mutually sustaining. The matching task of both would be WEO as enforcer and court as controller. However, the ICE is not the immediate logical Holy Grail for international environmental justice and particularly not for international environmental crimes, as it is not solely aimed towards criminal matters. Another fully equipped international court would expand the international court system even more, which would lead to competence problems, especially between the “main” courts. Before setting up an entire new

836 Postiglione, above n 308, at 325; Hockman, above n 662, at 230.
837 Riches and Bruce, above n 259, at 4.
838 Werle, above n 532, at 108.
court, it is wise to attempt entrusting the existing institutions with the matter in question. Even if a reformed ICC is still bound to its existing definitions and restrictions, it provides the expertise for international criminal prosecution, and it has a standing within the community of states. On balance, creation of an ICE would cause problems than would outweigh the good that it could accomplish.

Consequently, a decentralised approach involving the establishment of an ICE does not seem like the most adequate way to address international environmental crimes. From a broader scope, a more generalist court would be preferable in the situation than a highly specialised one.\textsuperscript{839} The environment relates to so many other areas in international relations that a general court – and specifically, a general criminal court - is the better way to address the situation, as long as the generalised court can maintain a strong voice relating to the environment. Therefore the best hope lies in strengthen the existing jurisdictional institutions and expanding their collaboration and interconnection. This means that the ICJ would undertake closer looks on environmental problems, and the ICC would start prosecuting crimes related to the planet’s environment; both of these actions would be taken under the assistance of the new WEO. As a consequence, in addressing international environmental crimes, creation of an ICE is not of the same necessity, as the creation of a WEO. Further implementation of international environmental crime in what the international community sees today as “mainstream“ crime would be more expedient than isolating environmental matters.\textsuperscript{840}

At the current time, there are no legal obstacles in creating a WEO or in reforming the ICC. The hurdles to doing so lie solely in the political and economical sphere. In a time where political barriers between the states of the world – including between long-time allies and even within the countries of the European Union exist – seem to be further developing, an ambitious project like the creation of a WEO or the reformation of the ICC can appear to be wishful thinking or even utopic.\textsuperscript{841} On the other hand, envisaging a utopia carries with it an inherent value and encourages us to further developments in the long run. There is a growing movement pushing international bodies to take on

\textsuperscript{839} Pedersen, above n 487, at 551. \\
\textsuperscript{840} Andrade, above n 29, at 160. \\
\textsuperscript{841} Pedersen, above n 487, at 556.
environmental projects, and as Kirby states, “never say never in international relations”.\textsuperscript{842} Although they often seem to appear to be slow-moving and stagnant, it is also true that international relations, politics and law can change rapidly.

To continue the metaphor used in Chapter One, regarding the influences of international environmental crimes being likened to snarled electric cables, it can be said, that the WEO would determine where and when to push and the reformed ICC schedules where and when to pull the cables to arrive at a comprehensive collaborative solution.

8.3 The call for international environmental criminal law
The purpose of this thesis was to confront the problem of international environmental crimes and to elaborate a legal institutional strategy of how these crimes could be tackled on an international level. The chapters above have shown that different international environmental crimes pose different threats. They vary, for example, in direction, intensity and relevance and may need different strategies to tackle them. Common to all is the fact that the primary approaches have to happen on an international level. This form of international crime has to be taken on by the community of states as a whole. Strengthening international collaboration is therefore not an option; it is the one and only solution to combat threats originating from international environmental crimes. There is much legal work to do in that regard. This work does not end with legal aspects; the findings of this effort are also linked to political, social and economic aspects. The reasoning throughout the chapters above leads to the following findings and recommendations:

\textsuperscript{842} Michael Kirby, former Justice of the High Court of Australia “A Public Lecture” (University of South Australia, Adelaide, 19 August 2014).
The problem of international environmental harm poses a serious threat to the international community and therefore needs more attention than it is currently receiving from a range of international entities. Therefore more international collaboration between all the aforementioned stakeholders is required. Strict regulation in this field is important to ensure a viable environment continues as a basis of life for humankind and other species.

A WEO is vital to act as a central organisation for steering and coordinating countermeasures against international environmental crimes, for gathering intelligence on environmental matters and for conducting investigations. That an intergovernmental body would play such a role is crucial in a general sense for international environmental law, but even more so for international environmental criminal law in particular.

Efforts have to be undertaken to lead the ICC to a “green” reformation, so that the jurisdiction of the ICC can be clearly extended to ecocide and further international environmental crimes. This approach can lead to the establishment of the ICC as a powerful judicial organ for the tackling of international environmental crimes in cooperation with the WEO.

The call for stronger rules and definite institutions for international environmental crimes is out there, now it has to be heard and implemented into the global legal framework by the involved stakeholders.
Bibliography

A. Cases and Resolutions


*Trial Smelter Arbitration* (U.S. v Canada) (Decision) [1941] 3 UN Report International Arbitration Awards 1905.


*Yanomani Indians v Brazil* (Judgment) Inter-American Court on Human Rights Case 7615 12/85, 5 March 1985.

B. Legislation

Bolivian Law of the Rights of Mother Earth, Bolivia (2010).

*Strafgesetzbuch*, Germany (1871).


C. Treaties and Conventions


Charter of the International Military Tribunal in Nuremberg (1945).


Consolidated version of the Treaty of the European Union C 326/13 (26 October 2012).


Paris Agreement on Climate Change (opened for signature 12 December 2015, entered into force 4 November 2016).


Statute of the International Court of Justice 33 UNTS 399 (opened for signature 26 June 1945, entered into force 24 October 1945).


D. Official publications and reports

Marc Ancrenaz and others “Pongo pygmaeus: The IUCN Red List of Threatened Species” (IUCN, Gland, Switzerland, 2016).


Daniel Challender Manis javanica: The IUCN Red List of Threatened Species (IUCN, Gland, Switzerland, 2014).


Food and Agriculture Organization of the United Nations The state of the world fishing and aquaculture (FAO, Rome, 2014).


Meeting of the Parties of the Montreal Protocol Decision XIX/12 (2007).


Christian Nellemann and others *The rise of environmental crime* (UNEP, Nairobi, 2016).


E. Books


Klaus Bosselmann *Earth Governance: Trusteeship of the Global Commons* (Elgar, Auckland, 2015).


Polly Higgins *Earth is our business: Changing the rules of the game* (Shepheard-Walwyn, London, 2012).

David Jensen and Silja Halle *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP, Nairobi, 2009).


F. Chapters in Books


Mohammed M Gomaa “The definition of the crime of aggression and the ICC jurisdiction over that crime” in Mauro Politi and Giuseppe Nesi (ed) *The International Criminal Court and the crime of aggression* (Ashgate, Trento, 2005).


Farhana Sultana and Alex Loftus “The Right to Water - Prospects and Possibilities” in Farhana Sultana and Alex Loftus (ed) The Right to Water - Politics, Governance and Social Struggles (Earthscan, London 2012).


Rufus Yerxa “The power of the WTO dispute settlement system” in Rufus Yerxa and Bruce Wilson (ed) Key Issues in WTO Dispute Settlement - The First Ten Years (Cambridge University Press, Cambridge, 2005).

G. Journals


Onelica Andrade “Environmental crime summit” (2012) 42(3) Environmental Policy and Law 159.


Lynn Berat “Defending the right to a healthy environment: Toward a crime of geocide in international law” (1993) 11(2) Boston University International Law Journal 327.


Mark A Drumbl “Waging war against the world: The need to move from war crimes to environmental crimes” (1998) 22(1) Fordham International Law Journal 122.


Christelle Himbert “A comprehensive approach to combating the criminal networks behind environmental crime” (2014) 51 UN Chronicle 20.


Angus Nurse “Linking the green and the mainstream” in Angus Nurse (ed) Critical Perspective on Green Criminology (Internet Journal of Criminology, 2014).


Arash Pourhashemi, S Zarei and Mansour Pournouri “A Deliberation on recent legal cases and judgements of the International Court of Justice on Environmental Disputes” (2015) 12 International Journal of Environmental Science and Technology 3391.


Achim Steiner “Putting a Stop to Global Environment Crime Has Become An Imperative” (2014) 51 UN Chronicle 8.


Mathis Wackernagel and others “National natural capital accounting with the ecological footprint concept” (1999) 29 Ecological Economics 375.


H. Internet Resources


CITES Secretary “Wildlife crime” CITES <www.cites.org>.


Guy Faulconbridge and Jonathan Saul “Islamic State oil is going to Assad, some to Turkey, U.S. official says” (10 December 2015) Reuters <www.reuters.com>.


ICE Coalition and University of Pennsylvania "Penn Design Project” ICE Coalition <www.icecoalition.org>.


International Court of Justice “Jurisdiction” International Court of Justice <www.icj-cij.org>.


Cecilia Jamasmie “Colombia wants illegal mining to be international crime” (9 January 2014) Mining <www.mining.com>.


Shehab Khan “CEOs can now be tried under international law at The Hague for environmental crimes” (19 September 2016) The Independent <www.independent.co.uk>.


N-tv “Killersmog toetet 100.000 Menschen in Suedostasien” (19 September 2016) N-tv <www.n-tv.de>.


Nick Squires “Mafia accused of sinking ship full of radioactive waste off Italy” (16 September 2009) The Telegraph <www.telegraph.co.uk>.


Ian Urbina “Palau vs. the Poachers” (17 February 2016) New York Times


I. Other

Hisashi Owada, Judge of the International Court of Justice “International Environmental Law and the International Court of Justice” (Inaugural Lecture at the Fellowship Programme on International and Comparative Environmental Law, Pazmany Peter Catholic University of Budapest, 2006).

Michael Kirby, former Justice of the High Court of Australia “A Public Lecture” (University of South Australia, Adelaide, 19 August 2014).