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Precautionary Action

A study on the Status and Implications of the Precautionary Principle in International Environmental Law

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Summary

In today’s society it is hard to achieve scientific certainty on how our actions might affect the environment in the future. This causes problems in legal disputes, as a state must produce evidence of harm in order to stop potentially harmful activities. One way to get around this problem might be an application of the precautionary principle, which is examined in this essay. The basic definition of the precautionary principle, which most scholars agree with, is that the principle sets lower requirements on the scientific evidence needed to oblige a state to take action for the sake of the environment.

The research questions used in this essay are firstly, whether the precautionary principle has reached the status of a legally binding principle in international environmental law, and secondly, what the principle in that case entails. Throughout the study case law along with different views in doctrine have been presented and examined in relation with the requirements for a principle to become customary international law.

The main findings are that there has been reluctance by international courts and tribunals to apply the precautionary principle in case law, although parties in disputes have frequently invoked it. Moreover, the principle is present in a large number of multilateral environmental agreements further strengthening its place in international environmental law. However, there are many different definitions of the principle making it hard to judge its status.

There are a few main interpretations of the principle that are explored in this essay. The first interpretation states that it is simply an obligation for states to act in favour of the environment even though there is no certain scientific proof of the harmfulness of an activity. One interpretation similar to this one is that the principle gives a right to action for a state in spite of scientific uncertainty and other obligations. The more extreme interpretations have to do with the burden of proof and either suggests a lowered burden of proof, or a reversed one.

Conclusively, it is clear that the precautionary principle now is a prominent feature in international environmental law, but that it cannot yet be said exactly what it entails, much due to such contrary definitions.
Sammanfattning


De två frågeställningarna i denna uppsats är huruvida försiktighetsprincipen har nått en status som juridiskt bindande princip i internationell miljörätt, och vad principen i så fall innehåller. I uppsatsen studeras rättsfall och åsikter i doktrin. Resultatet jämförs sedan med de krav som ställs i folkrätten för att en princip ska få sedvanerättslig status.

Några av uppsatsens viktigaste slutsatser är att internationella domstolar har varit försiktiga med att tillämpa försiktighetsprincipen även om parterna i fallen ofta åberopat den. Vidare återfinns principen i en lång rad viktiga traktater vilket styrker principens status i internationell miljörätt. Det konstateras även att det finns många olika definitioner av principen, vilket försvårar en undersökning av principens status.

I uppsatsen undersöks några av de viktigaste definitionerna av försiktighetsprincipen. Den mest basala stadgar att det finns en skyldighet för stater att agera för att förhindra potentiellt farlig verksamhet även då det inte säkert går att bevisa att en skada kommer att inträffa. En liknande tolkning är att principen kan användas för att ge en stat en rättighet till att handla utan säker bevisning och emot andra skyldigheter. De mer extrema tolkningarna involverar bevisbörda och anningen en sänkta beviskrav eller en omvänd bevisbörda.

Sammanfattningsvis kan sägas att försiktighetsprincipen numera är en viktig del av den internationella miljörätten, men att det är svårt att säga exakt vad den innehåller, mycket på grund av att det finns många vitt skilda definitioner.
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>1975 Statute</td>
<td>The 1975 Statute of the River Uruguay</td>
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<tr>
<td>ARSIWA</td>
<td>Articles on the Responsibility of States for Internationally Wrongful Acts</td>
</tr>
<tr>
<td>CARU</td>
<td>Administrative Commission of the River Uruguay</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EU</td>
<td>European Union</td>
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<td>ICJ</td>
<td>International Court of Justice</td>
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<td>ITLOS</td>
<td>International Tribunal for the Law of the Sea</td>
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<td>MEA</td>
<td>Multilateral Environmental Agreement</td>
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<tr>
<td>OSPAR Convention</td>
<td>Convention for the protection of the marine environment of the north-east Atlantic</td>
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<tr>
<td>Rio Declaration</td>
<td>The Rio Declaration on Environment and Development</td>
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<tr>
<td>SPS Agreement</td>
<td>The WTO Agreement on the Application of Sanitary and Phytosanitary Measures</td>
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<tr>
<td>Stockholm Declaration</td>
<td>The Declaration of the United Nations Conference on the Human Environment</td>
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<tr>
<td>TFEU</td>
<td>Treaty on the Functioning of the European Union</td>
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<tr>
<td>VCLT</td>
<td>Vienna Convention on the Law of Treaties</td>
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<td>WTO</td>
<td>World Trade Organisation</td>
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1. Introduction

1.1 General remarks

In today’s society environmental issues have been accepted as something we must attempt to solve. The challenge of environmental issues is that it is often hard to predict the consequences of one’s acts, and the consequences risk being very grave and in some cases irreversible. In short there is a lot of uncertainty surrounding the environmental problems we face today. One way of solving this challenge could be the use of the precautionary principle, which could lead to a greater responsibility for a state allowing potentially harmful activity on its territory through authorising or requiring action to stop the activity even before there is scientific evidence of the risk. This means the necessary measures can be imposed before it is too late.

The precautionary principle, or precautionary approach as it is often called, is a widely discussed topic in the field of international environmental law. There are many uncertainties leading to quite a number of questions, which of course means that a large number of people have chosen to study it and tried to clarify its status and meaning. Does it actually exist? Is it a binding rule of international law? What obligations does the principle in that case impose? In 2011 the ICJ judged in a case concerning pulp mills on the bank of the Uruguay River\(^1\) and while for the first time addressing the principle in question, managed to give rise to an even larger number of questions instead of making the situation clear.

1.2 Aim

The overall aim of this essay is to examine the status of the precautionary principle in international environmental law, with a focus on the situation after the ICJ judgement in the Pulp Mills case.

1.3 Research questions

Two research questions have been chosen for this essay. The first one is whether the precautionary principle has reached the status of a principle of international customary law.

\(^1\) Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010 [Hereinafter: Pulp Mills].
The second is what the principle actually entails if it has reached this status. Is it possible that the principle exists, but not in the sense that one might originally think?

1.4 Delimitations

I have decided on the following delimitations in order to limit the scope of my study. Firstly, the issue of the implementation of the principle in national legislation will not be addressed, nor will there be a discussion on the use of the principle in connection with specific areas of environmental law. Secondly, the use of the precautionary principle between states as a result of bilateral and multilateral treaties\(^2\) will not be studied in order to leave more space to a deeper study of the principle in customary international law. I have also chosen not to examine whether the precautionary principle could be used in other areas of international law such as human health protection. Lastly I will not further explore the relationship between the precautionary principle and other customary principles e.g. the preventive principle.

1.5 Methodology and theory

In the main, the legal dogmatic method has been used while writing this essay. This means that an investigation *de lege lata* is conducted, with the traditional sources of law as a basis. In this case, in the context of international law, the focus lies on customary international law, general principles of law and in some cases where relevant, also treaties. Of great importance are of course also cases from international tribunals.

In some parts of the essay a historical method has also been used, primarily in the background chapter, though it is also present in chapter three. To determine the status of a principle today one must also look into its historical context, which will be more apparent in chapter four, where the requirements for a principle to be a binding one are discussed.

In this essay, the mode of writing is in large parts descriptive, especially in the background and chapters three to six. However, the study has of course also analytical elements that are most noticeable in the analysis, but also in chapters four to six.

Finally, it is of great interest what effect an application of the precautionary principle would have on international environmental law. Therefore a section of a more philosophical nature

\(^2\) E.g. article 191 of the Treaty on the Functioning of the European Union.
has been added with different authors’ views on the possible dangers or advantages of the principle being part of binding international law. This is rather a discussion of *de lege ferenda* but will in any case be included as to illustrate the possible effects of the precautionary principle. This can be found in chapter six.

As the focus of the essay is the status of the precautionary principle today, the essay begins with a background chapter on the principle with only a shorter overview of the historical context and some possible definitions, this to facilitate the understanding of the principle. Thereafter follows an overview of relevant case law, with focus on a few more prominent cases that in greater detail have been examined in doctrine along with comments by leading researchers in the field. This is followed by a chapter with information on the requirements for a principle to become a part of customary international law and by that binding for all states. Continuing, the essay will examine the connection between the information above in the analysis, finally coming to a conclusive chapter with comments on the principle’s role in international environmental law today.

### 1.6 Research situation

As previously mentioned, the precautionary principle attracts a lot of interest due to its unpredictable nature. The principle is mentioned in most important books on international environmental law and international principles and it has been studied in many scientific articles. The most recent ones are often comments on the Pulp mills case, and these articles have indeed been very useful sources for this essay. Many studies also focus on the views by different international tribunals. For the most prominent see for example “Precautionary Pulp: Pulp Mills and the Evolving Dispute between International Tribunals over the Reach of the Precautionary Principle” by Daniel Kazhdan and “The Precautionary Principle in General International Law: Combating the Babylonian Confusion” by Arie Trouwborst.

### 1.7 Materials

The materials used the most in this essay is case law from international tribunals, most notably the Pulp Mills case, but also other judgements from primarily ICJ, WTO and ITLOS. The articles mentioned above have also been central for the study as well as the works by Trouwborst and de Sadeleer.
2. An introduction to the precautionary principle

2.1 Possible definitions

The precautionary principle is a concept that has gained a lot of attention in, primarily, international environmental law lately. Most scholars agree that the essence of the precautionary principle is an intention to act in a precautionary manner before there is “serious or irreversible” damage done to the environment, even though it might be uncertain what kind of harm will occur, or if it will at all be done. Another common opinion is that the principle covers possible damage both inside and outside states’ jurisdictions. The challenge is to give a legal definition of the principle and point out what legal consequences it has.

While researching the precautionary principle trying to find a good definition, one often comes across the one stated in the Rio declaration from 1992.

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

The Rio declaration is not a binding treaty but part of what we call “soft law” and viewed as a recommendation for states. When using the precautionary principle one must acknowledge the fact that the definition in soft law is only the way it has been formulated in that document, and not necessarily an account of the principle in customary international law. What the principle contains might therefore differ from the definition stated. One must not, however, ignore the fact that some of the principles derived from the declaration have since been recognised as customary international law.

In order to fully understand the precautionary principle one must recognise that the principle could have implications not only in the creation of rules, but also in the enforcement. Many sources concentrate on only one of the sides, thus not giving a complete account of the

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3 Article 15 of the Rio declaration.
4 Trouwborst 2002, p. 15.
5 Article 15 of the Rio Declaration.
6 Article 15 The Rio Declaration.
7 Instruments without legally binding force.
8 Beyerlin and Marauhn 2011, p. 16.
9 Beyerlin and Marauhn 2011 p. 34.
situation. Furthermore, it is important to note that the principle might on one hand include a
duty for a state to act in a precautionary way, and on the other hand a right for a state to
observe precaution.  

The main different propositions to what the precautionary principle actually is, range from
the more abstract idea of an agreement by states to act in such a way that they are cautious in
decisions where environmental risks are taken to the perhaps most extreme version where
there is a reversal in the burden of proof. In addition to these, one might suggest an obligation
for states to regulate or prohibit activity that might severely harm the environment, also
without convincing proof of the risk and a reduced burden of proof. These propositions will
be further examined in chapter five below.

2.2 Different terms for the precautionary principle

With exception of the term “precautionary principle” one often finds the terms “precautionary
approach” and “precautionary action” in cases, doctrine and treaties concerning precaution.
There are no clear definitions of either of them although some interpret “precautionary
approach” to be less strict than the principle, enabling a more flexible use. Others associate
the word principle with a status as a legally binding principle of customary law in contrast
with the approach. Most, however, use the terms interchangeably and this is also the way it
will be used in this essay, as the aim is to examine the precautionary concept as a whole.

2.3 The historical context

2.3.1 Before the precautionary principle

It has since the Trail Smelter case been quite clear that a state is not allowed to use or
permit use on its territory that causes harm outside its own territory. This was further
established in the 1972 Stockholm declaration where the principle of “no harm” was
introduced. In short, the principle prohibits transboundary environmental harm and is an
accepted binding international principle. This principle requires that an “injury is

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10 Trouwborst 2007, p. 185.
11 Sands, Peel, Fabra and Mackenzie 2012, p. 222.
12 Trouwborst 2002, p. 3-5.
13 Trail Smelter (US v. Canada), 3 Reports of International Arbitral Awards pp. 1905-1982 (1941) [Hereinafter:
Trail Smelter].
14 Article 21 of the Stockholm Declaration.
established by clear and convincing evidence”\textsuperscript{16} but does also include cases where there is an established risk for harm to occur.\textsuperscript{17} The precautionary principle can be seen as a response to this as there are situations today where we might seriously harm the environment without first being able to obtain the “clear and convincing” evidence needed to prohibit the harmful activity.\textsuperscript{18}

Moving on to the creation of rules, the approach adopted was for a rather long time the “assimilative capacity approach”, or as it is also called, the “permissive approach”. This phenomenon has its foundation in the idea that we can use natural resources as long as we do not surpass the carrying capacity of ecosystems. Thus it is presumed that we can in fact know where this limit is and that scientific certainty is possible to achieve. In the event that a possible environmental harm cannot be clearly foreseen, imposing preventive measures is neither an obligation nor a reason to disregard other obligations following by international law. Today we have realised that once a harm is accurately predicted it might be too late, and indeed very expensive, to solve the problem.\textsuperscript{19}

\textbf{2.3.2 A brief historical overview}

One of the first mentions of a concept resembling the precautionary principle was already 1969 in Swedish national law where there was a reversal of the burden of proof in cases of environmentally hazardous activities already when there was only a risk for the harm to occur.\textsuperscript{20} The principle also has its background in laws prescribing EIAs before executing acts that might be harmful for the environment and goals for “no harm” in scientifically uncertain situations.\textsuperscript{21} After this, the concept of precaution has been used in numerous MEAs, conventions and declarations, also ones of global range.\textsuperscript{22} Today it can be found in over 60 multilateral treaties.\textsuperscript{23} There is no question that the principle is important in environmental law, and often invoked in disputes between states. The main questions now are what status it has in customary law, if it affects the burden of proof, or has other legal consequences and if also other areas of international law, such as human health protection might be affected.\textsuperscript{24}

\textsuperscript{16} 	extit{Trail Smelter} p. 648-736, p. 716.
\textsuperscript{17} Beyerlin and Marauhn 2011 p. 43.
\textsuperscript{19} Trouwborst 2002, p. 18-19.
\textsuperscript{20} Beyerlin and Marauhn 2011, p. 47.
\textsuperscript{21} Trouwborst 2002, p. 16
\textsuperscript{22} Sands, Peel, Fabra and Mackenzie 2012, p. 220.
\textsuperscript{23} Trouwborst 2007 p. 187.
\textsuperscript{24} Trouwborst 2007 p. 185.
3. Cases from international courts

3.1 General comments comments

A few cases are presented below, which have been chosen because they are considered to well represent the opinions set forth by the most significant courts in this issue. It can also be noted that disputes in international environmental law do not very often reach courts and tribunals, but are settled in other ways. This is due to a number of factors, including large ees for legal processing, exceptions in MEAs, and a general view that co-operation and peaceful settlements between states better favour the environment. Moreover, state responsibility for acts covered by customary law, is only relevant where there is an international wrongful activity\textsuperscript{25}, which is quite rare in environmental law. Most courts have been reluctant to use the precautionary principle, although it has been invoked\textsuperscript{26}, though there are cases when it has been applied or at least mentioned which will be investigated below.

3.2 The principle in case law from ICJ

3.2.1 Cases before the Pulp Mills case

One of the first cases in which the precautionary principle was invoked is probably the Nuclear Tests cases from the ICJ\textsuperscript{27}. These deal with French atmospheric nuclear testing and the dispute commenced when New Zealand and Australia claimed that a state engaging in such activities must prove their harmlessness. The case was closed, due to cease in testing by France, and then, twenty years later, reopened, only to once again be closed, thus there is no ruling by the court and no comment on the precautionary principle in relation to the case.\textsuperscript{28} However, there are interesting dissenting opinions maintaining that already in 1995 the precautionary principle could have attained the status of a principle of customary international law relating to the environment.\textsuperscript{29} Judge Weeramantry even goes as far as stating that the approach containing a reversal of the burden of proof, placing it on the state in

\begin{itemize}
  \item Articles 1-3 ARSIWA.
  \item de Sadeleer 2002, p. 100.
  \item Nuclear Tests (New Zealand v. France), Judgment, I.C.J. Reports 1974 [Hereinafter: Nuclear tests].
  \item Nuclear Tests para. 65.
  \item E.g. Dissenting Opinion of judge Ad Hoc Palmer, appended to the ICJ’s Order of the 22 September 1995 concerning the Request for an Examination of the Situation in Accordance with paragraph 63 of the Courts Judgement of 20 December 1974 in the Nuclear Tests (New Zealand v France) para 91.
\end{itemize}
favour of the potentially harmful activity “… is sufficiently well established in international law for the Court to act upon it.”

The Gabčíkovo-Nagymaros case is a well-known judgement from the ICJ. In this case Hungary invoked the precautionary principle to legitimise the right to stop works on a dam on the Danube and justify a suspension of the treaty governing the project. This is one of the times when the principle has been used to form a right for a state instead of a duty. In order to be able to suspend the treaty Hungary had to prove a case of necessity, which requires that an “essential interest” has been threatened by a “grave and imminent peril.” The court concludes that “the mere apprehension of a possible "peril" could not suffice in that respect” and that the lack of scientific certainty makes it impossible to prove the existence of one. Unfortunately, the court does not refer to the precautionary principle in its judgement.

3.2.2 The pulp Mills case

The ICJ settled the Pulp Mills case in April 2010 after several years of conflict between Uruguay and Argentina over the construction of pulp mills on the bank of the River Uruguay. The river is situated between the two states, so a statute, which governs the use of the river, was concluded between the states. Among other provisions, the statute includes a duty to inform CARU as well as the other party of activities that might harm the river. After an EIA was performed, Uruguay gave a Spanish company permission to construct a pulp mill on its territory.

The court admits that general international law should be included in the interpretation of the treaty between the states and it is on this Argentina bases its argument that the precautionary approach should be applicable. Concerning the effects of the precautionary approach Argentina claims "the burden of proof will be placed on Uruguay for it to establish

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30 Dissenting opinion of Judge Weeramantry, appended to the ICJ’s Order of the 22 September 1995 concerning the Request for an Examination of the Situation in Accordance with paragraph 63 of the Courts Judgement of 20 December 1974 in the Nuclear Tests (New Zealand v France) p. 348 (64).
32 Gabčíkovo-Nagymaros, para. 97.
33 The environment was considered a possible "essential interest" in para. 53.
34 Gabčíkovo-Nagymaros, para. 50.
35 Gabčíkovo-Nagymaros, para. 54.
36 Pulp Mills para. 25.
37 The 1975 Statute of the River Uruguay.
38 The Administrative Commission of the River Uruguay.
39 Article 7 of the 1975 Statute.
40 Pulp Mills, para. 64.
that the Orion (Botnia) mill will not cause significant damage to the environment”\textsuperscript{41}. The court admits that adopting a precautionary approach in the interpretation and application of the 1975 statute may be appropriate, though not in the way that it changes the burden of proof.\textsuperscript{42} Regarding the standard of proof it seems to be no lower than usual and the court writes that “[…]in the absence of convincing evidence […] the Court is not in a position to conclude that Uruguay has breached the provisions of the 1975 Statute.”\textsuperscript{43} The standpoint by the ICJ in this case has been interpreted quite differently in doctrine, which will be further examined below.

3.3 The principle in case law from WTO

WTO, though not a court used for pure environmental cases, has had an increasing number of cases where the precautionary principle was invoked in its dispute settlement bodies.\textsuperscript{44} Those revolve mostly around public health issues, a field quite close to environmental law, which unfortunately falls outside the scope of this essay.\textsuperscript{45} In a well-known case from the WTO panel, the EC claimed that the precautionary principle should be used in the assessment of the case as a principle of general international law, which revolved around a dispute on trade barriers in accordance with the SPS agreement. The United States was against the application of the principle and won support by the court which stated that “and that the precautionary principle, at least outside the field of international environmental law, still awaits authoritative formulation”.\textsuperscript{46} In several cases after this, the court referred to its judgement, withstanding that the precautionary principle was not to be considered part of general international law in relation to the cases before the court.\textsuperscript{47}

\textsuperscript{41} Pulp Mills para.160.
\textsuperscript{42} Pulp Mills para. 164.
\textsuperscript{43} Pulp Mills para. 228.
\textsuperscript{44} de Sadeleer 2002, p. 92.
\textsuperscript{45} de Sadeleer 2002, p. 104.
3.4 The principle in case law from ITLOS

In the *Southern Bluefin Tuna* case\(^\text{48}\) from ITLOS, there is a quite clear application of the precautionary principle. The case involves an experimental fishing programme of the southern bluefin tuna by Japan. The fishing programme jeopardises the conservation of the stock and therefore other states have complained. The court states that although there is no clear scientific evidence measures must be taken to prevent the deterioration of the stock.\(^\text{49}\) Also, the involved states directly mention the principle on several occasions throughout the judgement, even though the court chooses not to use the term. Judge Laing does in a separate opinion comment on the use of a precaution in the judgement. He claims the “precautionary principle” is not applied but the “precautionary approach” and interprets this as a more flexible version of the principle.\(^\text{50}\) He also clarifies that the court has not “engaged in an explicit reversal of the burden of proof”\(^\text{51}\).

In the *Mox Plant* case\(^\text{52}\) concerning nuclear power station in the United Kingdom, Ireland claimed there was a reversal of proof requiring the United Kingdom to set forth evidence proving that the plant would not do any harm.\(^\text{53}\) The court does not comment on the principle, but concludes that there is reason to oblige the parties to cooperate with each other and enter into consultation with each other.\(^\text{54}\) Some regard this as a measure of precautionary character.\(^\text{55}\) Lastly, ITLOS does in an advisory opinion state that there is “a trend towards making this approach part of customary international law”\(^\text{56}\).

\(^{48}\) *Southern Bluefin Tuna* cases (New Zealand v. Japan; Australia v. Japan), Provisional measures, Order of 27 August 1999 (ITLOS, cases nos. 3 and 4) [Hereinafter: *Southern Bluefin Tuna*].
\(^{49}\) *Southern Bluefin Tuna* para. 80.
\(^{50}\) Separate opinion by judge Laing in the *Southern Bluefin Tuna* case para. 19.
\(^{51}\) Separate opinion by judge Laing in the *Southern Bluefin Tuna* case, para. 21.
\(^{52}\) The *Mox Plant* case (Ireland v. United Kingdom), Provisional measures, Order of 3 December 2001 (ITLOS cases no. 10 [Hereinafter: *Mox Plant*].
\(^{53}\) *Mox Plant*, para. 71.
\(^{54}\) *Mox Plant*, para. 89.
\(^{55}\) See e.g. Sands, Peel, Fabra and Mackenzie 2012.
\(^{56}\) *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Sea*, Advisory opinion, (Seabed disputes chamber of ITLOS, case no. 17), para. 135.
4. Binding international principles

4.1 State sovereignty

One of the most basic institutes of international law is the sovereignty of states. In the context of environmental law this state sovereignty is mainly the right for a state to set forth policies and laws concerning natural resources and the environment on its own territory. However it also includes the right to be spared violations on its sovereignty from other states.\(^{57}\) In order to infringe on another state’s sovereignty there must be clear legal grounds. It has been said that “formal sources” like those one can find on a domestic level in the constitution, are not available to someone trying to determine the content of international law.\(^{58}\) Thus, there is a need to establish the method for deciding which rules are of such dignity as to be used on states. In the work by Beyerlin and Marauhn the terms “normative quality” is used when principles and rules have steering effects on states’ behaviour\(^{59}\) This is what binding legal rules mean throughout this essay.

The statute of the international court of justice states what sources ICJ can use when judging in a dispute. This is a good starting point for determining what is actually binding international law as it is often considered a recitation of the sources of international law.\(^{60}\)

Article 38 of the statute reads as follows:

1. The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:
   a. international conventions, whether general or particular, establishing rules expressly recognized by the contesting states;
   b. international custom, as evidence of a general practice accepted as law;
   c. the general principles of law recognized by civilized nations;
   d. subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.
2. This provision shall not prejudice the power of the Court to decide a case ex aequo et bono, if the parties agree thereto.

In the following section there will be focus on the international custom as this essay revolves around the question if the precautionary principle has reached this status.

\(^{57}\) Sands, Peel, Fabra and Mackenzie 2012, p. 11.
\(^{58}\) Brownlie 2012, p. 3.
\(^{59}\) Beyerlin and Marauhn 2011 p. 37.
\(^{60}\) Brownlie 2012, p. 5.
4.2 Customary international law

Customary international law is made up of binding legal rules that can be said to be of special importance as they cause obligations for all states independently of the explicit consent of the state in question. If an environmental principle attains this status it undoubtedly has the potential to greatly influence international environmental law.\(^{61}\)

It is hard to establish what actually is customary international law, there is need both prove consistent state practice and the presence of *opinio juris*, which can be seen in the article 38 (1)(b) of the ICJ statute. Those prerequisites will be further examined below in chapter 4.2.1 and 4.2.2.

Another dimension of this issue is that a legal rule or principle can have reached the status of international customary law in a certain area or context. Most legal scholars now agree that the precautionary principle is in fact a customary principle in the context of the EU, even though their opinions diverge concerning the principle’s status in a wider perspective.\(^{62}\) As previously stated, this will not be further explored in this essay.

Concerning the relation between treaties and customary law it is quite clear that a rule being present in a treaty does not prevent it from also being part of customary international law.\(^{63}\) Here it must be noted though, that all states are not bound by the wording of the declaration or convention, but by the essence of the principle. The definition of the principle can be clarified by the text in question as this might be one source describing state practice, but it is not binding. Also, when you say all states are bound by the principle as present in customary law, also the ones adhering to a treaty regulating the matter are. Rules in soft law are often precedents to rules later evolving into internationally binding rules.\(^{64}\) In our case, concerning the precautionary principle, this is of course important as there is a great number of examples of soft law recommending a precautionary approach in the field of environmental law. Most notable is of course article 15 in the Rio declaration.

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\(^{61}\) Sands, Peel, Fabra and Mackenzie 2012 p. 111-112.  
\(^{62}\) Sands, Peel, Fabra and Mackenzie 2012 p. 228.  
\(^{63}\) Article 38 VCLT.  
\(^{64}\) Sands, Peel, Fabra and Mackenzie 2012 P. 95.
4.2.1 State practice

State practice is the objective side that needs to be shown for a principle to have the status of a customary rule. For state practice to reach the requirements to form binding legal rules it must be of a certain duration, consistency and generality. The sources used to evaluate these aspects are quite numerous and include, among others, diplomatic correspondence, policy statements, comments by governments on drafts produced by the ILC, international and national judicial decisions, recitals in treaties and other international instruments and the practice of international organs. The different sources, naturally, have different value depending on the circumstances. It is important to be careful while determining the meaning of the source at hand. According to de Sadeleer, the presence of a principle in a convention or similar, can in some cases weaken its customary value if it is presented in such a way that it is not presumed to be a legally binding principle.

Concerning the duration of the practice, there is no specified time requirement, but in order to prove the consistency and generality of the practice it is of course easier if there has passed some time. Turning to consistency, there is no requirement of complete uniformity, though a substantial one is necessary. If there are states disagreeing, or simply not stating an opinion about the topic, it is hard to know what this means. Perhaps the state does not deem it necessary to speak up in the question and perhaps a statement against the rule is the exception that proves the rule.

4.2.2 Opinio juris

Opinio juris is the requirement found in the definition in article 38 of the ICJ statute, which states that it has to be a practice “accepted as law”. Consequently, this is the subjective side showing that the act constituting the state practice was committed with the purpose of following legal rules. In other words, the state has to act in this way due to a “sense of legal obligation”. Some writers oppose the necessity of opinio juris, but it is quite clear that the majority agree on the matter. The existence of opinio juris is of course hard to prove, though in many cases courts choose to accept that there is opinio juris if there is prevailing state

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65 Beyerlin and Marauhn 2011, p. 282.
66 Brownlie 2003, p. 7.
67 Brownlie 2003, p. 6.
69 Brownlie 2003, p. 7-8.
70 Brownlie 2003, p. 8.
practice along with a clear opinion in doctrine. In some cases, however, courts have chosen to demand more extensive evidence of an opinio juris.

4.3 The principle’s connection to custom

Arie Trouwborst, an author behind some of the most prominent works in this field, starts a chapter on the legal status of the precautionary principle by saying that “… defending the position that precautionary action is mandated by a principle of natural law would be as easy as falling off a log. “71. And also states that the idea of in dubio pro natura72 is a strong argument for adopting regulations including a precautionary approach. This is however not enough legal ground today, so there is a need to discuss the precautionary principle’s part of customary international law. As this study does not include the materials needed to properly research the state practice, this chapter includes a resume of opinions on the matter by important authors in doctrine.

In his very profound study of the sources relevant for determining the precautionary principle’s status, Trouwborst examines treaties, declarations and action programmes, practice of international organisations, general assembly resolutions, international judicial decisins and state practice at the domestic level.73 The result found is that there is a widespread use of the precautionary principle in the absolute majority of these sources, though there are different formulations and definitions of the principle.74 As previously mentioned, there need not be absolute conformity, so this result could very well be enough. In addition, Trouwborst points out that the cases where states have not acted in conformity with the principle has often been regarded as breaches of the rule, further strengthening the opinion of the principle being regarded as binding by most states.75 The source that stands out is judgements by international courts, as they have on the most part been hesitant to even acknowledge the principle. When it comes to state practice, though, the fact that states continue to invoke the principle in cases, in spite of the cautiousness by tribunals could speak in favour of the principle.76

72 “In doubt, in favour of nature”.
74 Trouwborst, 2002, p. 245.
75 Trouwborst, 2002, p. 246.
Concerning *opinio juris*, the evidentiary difficulty makes it hard to explore properly. One argument one comes across while studying doctrine is that the simple fact that the precautionary action is referred to in numerous MEAs as a general principle or approach which must be followed, is a sign of a belief among states that it is a somewhat finished concept which must be followed, because of a legal obligation and not only because ethical or moral belief.⁷⁷ Through this, Trouwborst finds that the precautionary principle has without doubt reached the status of a “…general, perhaps even universal custom”⁷⁸

The issue, however, is seen as more complex by other authors. The presence of the principle in many MEAs could, as a matter of fact, be a sign of an *opinio juris* not in favour of granting the principle the status of international customary law. In many cases the principle is only referred to as an aim or even inspiration for states bound by the treaty, indicating that it is not seen as a binding principle of international law.⁷⁹ It must, however, also be pointed out that exceptions exist such as in the 1992 OSPAR Convention which states that the contracting parties “shall apply” the precautionary principle.⁸⁰

The fact that the precautionary principle is quite new does speak against an acquired status as a general principle of customary law. Although there is no specific amount of time required for a principle to attain this status, it is crucial that the there has been enough time for state practice and *opinio juris* to have been clearly demonstrated.⁸¹

The principles presence in so many MEAs enables a successful argument for a consistent state practice supported by *opinio juris*. Though, due to the uncertainty in the judgements by international courts it might still be too early to form an opinion. In the view of many authors all we can know is that is an “emerging rule of customary international environmental law that can claim eminent importance”⁸² Perhaps more time must pass before there can be proof of the principle’s status. This is contradicted by de Sadeleer who means that there is sufficient state practice and a clear enough *opinio juris* to be quite certain of the precautionary principle’s status as a general principle of customary international law.⁸³

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⁸⁰ Article 2.2(a) of the OSPAR Convention.
⁸¹ Beyerlin and Marauhn 2011, p. 282.
⁸² Beyerlin and Marauhn 2011, p. 56.
5 Different views on the principle

5.1 Precaution as an obligation

Trouwborst does in his works give a definition of the precautionary principle seen as an obligation:

“Whenever, on the basis of the best information available, there are reasonable grounds for concern that serious and/or irreversible harm to the environment may occur, effective and proportional action to prevent and/or abate this harm must be taken, including in situations of scientific uncertainty regarding the cause, extent and/or probability of the potential harm.”

This definition has little to do with the procedural side of the principle, but rather regulates state action and creation of rules within states. It also reconnects to the idea of action in spite of uncertainty. Of course, using this interpretation, there is need for scientific research and some knowledge, as there need be “reasonable grounds for concern”. However, the scientific proof need not prove a certain quantifiable risk. This way of seeing the precautionary principle is very close to the definition in article 15 of the Rio Declaration, although a clarification adding more detail to the concept.

Another view on the principle as an obligation is that it creates a responsibility to carry out EIAs before engaging in potentially harmful activities. Some even think this is what ICJ means in their judgement in the Pulp Mills case as this is the only concrete effect relating to the principle.

5.2 Precaution as a justification

The instances where a state need a legal rule to support it taking environmental measures is when the measures are in conflict with another legal obligation. It is in those cases states have tried to invoke the precautionary principle as that rule. Examples of this is the Gabčíkovo-Nagymaros case when Hungary wanted to escape obligations derived from a treaty and the EC hormones case in which the EC wants to impose trade barriers in conflict with international law. In the case of a right for states to take action the definition is according to Trouwborst very much like the one he presented for obligations. The difference is that the

84 Trouwborst, 2006, p. 159.
86 Trouwborst, 2007, p. 189.
87 Kazhdan 2011, p. 547.
threshold of harm is lower and already significant harm is enough to produce the right to action.\textsuperscript{88}

5.3 \textbf{The burden of proof}

5.3.1 \textbf{Introductory remarks}

Traditionally in international law, a party needs “clear and convincing evidence to fulfil its burden of proof.”\textsuperscript{89} Moreover, the burden of proof in international law generally, in accordance with the rule of \textit{onus probandi incumbit actori}\textsuperscript{90}, lies with the party opposing an activity. In this context it means that someone claiming that there is an environmental risk has to prove that damage of sufficient magnitude will, or might, occur.\textsuperscript{91}

The burden of proof can be seen in two ways. Firstly there is the so-called “burden of production” and secondly the “burden of persuasion”. The burden of production moves back and forth between the parties during the dispute, as they have to refute the argument made by the other party. An example of this is that when one party proves that a treaty has not been suspended in accordance with existing regulations, the burden of production moves to the respondent who has to give an acceptable reason for it, for example proving a state of necessity. The burden of persuasion, on the other hand, stays with one party throughout the whole dispute.\textsuperscript{92} This is the party that bears the risk when it cannot put forward sufficient evidence.\textsuperscript{93}

5.3.2 \textbf{Reversed burden of proof}

As briefly mentioned in the background chapter of this essay, the most extensive interpretation of the precautionary principle is that it causes a reversal of the burden of proof. Those in this opinion claim that the onus should lie on the party wanting to engage in potentially harmful activity to prove that there is no such risk.\textsuperscript{94}

Reversals of the burden of proof have been done before, on a domestic, but also international level, in other fields of law. One example of this is in EU discrimination law where the

\begin{flushleft}
\textsuperscript{88} Trouwborst 2007, p. 188.\\
\textsuperscript{89} See \textit{Pulp Mills}.\\
\textsuperscript{90} The burden of proof is on the plaintiff.\\
\textsuperscript{91} Sands, Peel, Fabra and Mackenzie 2012 p. 222.\\
\textsuperscript{92} Ambrus 2012, p. 263.\\
\textsuperscript{93} Ambrus 2012, p. 263.\\
\textsuperscript{94} Trouwborst 2007, p. 187.
\end{flushleft}
respondent bears the onus. However, in this case, the burden of proof has been included in a directive and does not follow only from a general principle.\textsuperscript{95}

Dr Monika Ambrus, assistant professor at the Erasmus University Rotterdam, argues that in order to be an actual reversal of the burden of proof, it is the burden of persuasion that must be put on the respondent already in the beginning of the process.\textsuperscript{96} Because there is no actual shift in the burden of proof per se during the process, she refers to this phenomenon as a “special allocation of the burden of proof”\textsuperscript{97} which is probably a better definition.

Ambrus acknowledges the fact that there is no evidence of the principle being used as to reverse the burden of proof in case law. However, she maintains that it probably should be used in this way, by introducing a fairness-based argument, which she claims justifies a special allocation.\textsuperscript{98} The argumentation is based on Franck’s understanding of normative fairness\textsuperscript{99}. Some important points mentioned that strengthen the assertion are the difficulty for the applicant to gather the evidence compared to the respondent unequal positions and the need of effective enforcement of the protection of the environment.\textsuperscript{100} The author also states that compliance with the principle of \textit{in dubio pro natura} requires that the evidentiary situation of the party wanting to protect the environment is facilitated.\textsuperscript{101}

According to Trouwborst, the precautionary principle as it is in customary international law, does not contain a reversal of the burden of proof, even though it does in some MEAs and in national legislation.\textsuperscript{102} Though he does admit that in order to meet the needs of effectiveness and proportionality a reversal of the burden of proof might be very useful.\textsuperscript{103}

Also when the principle is seen as entailing a special allocation of the burden of proof, it could be used by a state wanting to invoke the principle as a right or justification of an action such as in the Gabčikovo-Nagymaros case. This has, however, not had any success in case law.

\textsuperscript{96} Ambrus 2012, p. 264.
\textsuperscript{97} Ambrus 2012, p. 265.
\textsuperscript{98} Ambrus 2012, p. 266.
\textsuperscript{99} Ambrus 2012, p- 260.
\textsuperscript{100} Ambrus 2012, p. 266.
\textsuperscript{101} Ambrus 2012, p.168.
\textsuperscript{102} Trouwborst 2007, p. 192.
\textsuperscript{103} Trouwborst 2007, p. 193.
5.3.3 Lowered standard of proof

Trouwborst, along with many others today, claim that the precautionary principle has not the effect of a reversal of the burden of proof, but that of a lowered one.\textsuperscript{104} In some cases we can see a clear evolution of the standard of proof from the one shown in the Trail Smelter case where the party claiming an activity is harmful must reach a standard of “clear and convincing evidence”.\textsuperscript{105}

A lowered standard of proof does have the effect that the burden of production is more easily switched to the party wanting to carry out a potentially harmful activity who then has to prove that it has acted in compliance with its obligations. Consequently it would be easier for a party to prove its initial argument. An interesting question regarding this is of course what standard of proof should be applied in this case. The only thing most people agree on is that there can be no absolute certainty of an activities harmlessness, just as it is not possible to definitely prove that an activity will irreversibly harm the environment.\textsuperscript{106}

Some authors mean that the judgement in \textit{Southern Bluefin Tuna} was based on a lowered standard of proof, given that Australia and New Zealand in the end succeeded in their claim even though there was scientific uncertainty.\textsuperscript{107} However, this is difficult to determine considering the court did not mention anything about a reversed burden of proof in its judgement.\textsuperscript{108} The court might have concluded that the evidence was, after all, sufficient.

\textsuperscript{104} Trouwborst 2007 p. 192.
\textsuperscript{105} Trouwborst 2007, p. 192.
\textsuperscript{106} Trouwborst 2007, p. 193.
\textsuperscript{107} \textit{Southern Bluefin Tuna}, para 80.
\textsuperscript{108} Kazhdan 2011, p. 536.
6 Advantages and disadvantages of implementing the precautionary principle

In order to clarify what consequences, positive and negative, an implementation of the precautionary principle could have, this chapter will explore some of the arguments often heard in the debate.

To begin with, today there is a need to act before we can be completely sure about the consequences for the environment. Science today is simply not up to date with the possible ways in which we could endanger the environment in the future. According to a great number of scholars, adopting the precautionary principle is the only way to adequately protect the planet and the environment.\textsuperscript{109}

The traditional way of seeing international environmental law, with a “permissive approach” suggests that it is acceptable to perform potentially harmful activities as long as there is no clear scientific evidence of the risk. This, of course, is a more tolerant approach to economic expansion as we have traditionally seen it. An implementation of the precautionary principle would hinder potentially harmful industry, indirectly causing an economic loss for companies and states. In the Pulp Mills case, the investment accounted for 3 % of the GDP of Uruguay, which makes it easy to understand a reluctance to prevent the realisation of the project. On the other hand there are ecological concerns and a possible irreparable loss of natural resources, which could lead to even worse problems in the future, including health risks, economical loss etc. These could possibly be hindered or at least diminished, could some hazardous activities be prohibited.\textsuperscript{110} In general, the precautionary principle is regarded as rather cost-effective, mainly because repairing is often more expensive than preventing.\textsuperscript{111}

Moving on to the definition of the principle as one concerning the burden of proof, implementing the precautionary principle would mean that the evidentiary burden was placed on a party that often has better access to evidence in the matter.\textsuperscript{112} Indeed in the Pulp Mills

\textsuperscript{109} Trouwborst 2002, p. 263. \\
\textsuperscript{110} Trouwborst 2006, p. 194. \\
\textsuperscript{111} Trouwborst 2007, p. 193. \\
\textsuperscript{112} Trouwborst 2006, p. 198-199.
case there was a mention of the difficulty for Argentina to gather the necessary evidence to meet the standard of proof set up, not necessarily because there was none, but perhaps because it was not available to them.

An additional reason for switching the burden of proof is the recognition of the fact that the parties are often very unequal in the process as it is often private individuals, NGO’s and indigenous peoples being wronged by the state. 113 Often, however, there is transboundary harm and thus a case between states equal power. 114

Furthermore, a lowered standard of proof, or a special allocation of it might make states more inclined to bring cases concerning harmful activities before international courts and tribunals since it could make it easier in succeeding in their argumentation. Furthermore, it would be less expensive for an applicant as the evidentiary burden would be placed on the respondent who would have to carry out potentially costly investigations of the activities. 115 This could be positive as more environmental crimes could be prosecuted, but it would also mean an increased burden for the courts that already in many cases struggle with too many cases that continue for years.

Another perspective is that there can of course never be certainty. The opponents of the precautionary principle often argue that no one could ever prove that an activity causes no harm. There is, however, probably no need to set the standard of proof so high that complete certainty is needed. As Trouwborst puts it “evidence of no harm” can never be achieved, unlike “no evidence of harm” which is a more realistic viewpoint. 116

113 Ambrus 2012, p. 261.
114 Trouwborst 2006, p. 199.
115 Kazdhan 2011, p. 547.
7 Analysis

7.1 The status of the precautionary principle

What can be concluded from this study is foremost that the precautionary principle seems to have much support in legal doctrine. Many authors accept its status as part of customary international law, and through that, a legally binding principle for all states. Some of the most notable authors of this opinion are Trouwborst and Sadeleer who also have written some of the most extensive works on the subject. Where authors do not agree with this view, they often state that the principle is well on its way of becoming such a binding legal rule.

In judicial decisions from international courts and tribunals, the message is not as clear. In recent judgements, especially the Pulp Mills case, the court does acknowledge the precautionary principle as a binding principle that can be applied by a court. The problem is that in no judgement is there a clear definition of the principle, or an explanation of how the principle was applied in the case. In one way, perhaps the long awaited ICJ judgement where the principle was finally mentioned only weakened the status of the principle as its significance and content was so vague. On the other hand, the fact that so many states continue to invoke the principle when they bring cases before international courts is a sign of a clear state practice and perhaps also opinio juris. Many states seem to believe that the principle is a legal obligation, and non-compliance with it could be seen as breaches of the rule.

When it comes to the question of state practice and opinio juris, it is important to discuss what role the different sources play. As stated before, the sources have different values depending on the situation. Some sources are of course more relevant in certain areas of law for example. When it comes to judgements by international courts it can quite easily be argued that they are of great relevance, as this is how the dispute at hand is actually settled. In this case, giving the ICJ and WTO judgements a greater importance does strengthen the view that the precautionary principle has not yet attained the status of a general customary principle. It most, nevertheless, be noted that the situation in environmental law is fairly special, as disputes often do not reach international courts and tribunals, but are settled in other ways. Perhaps this could be a reason to put less emphasis on the cases from ICJ, WTO
and ITLOS. As MEAs and other agreements play a much larger role on the subject, maybe they should be seen as more important than judicial decisions in this context.

Furthermore, the uncertainty of what the principle actually entails is an obstacle to determining its status. It is true that one can in a convincing way argue the existence of satisfactory state practice and *opinio juris* on the precautionary principle, but when the different sources in favour of granting the principle a status as part of international customary law seem to refer to different principles, albeit under the same name, is it really a consistent state practice? One could also argue that all different mentions of the precautionary principle in doctrine, judicial decisions and MEAs present a highly divergent state practice where most of them use different principles in the same situations.

### 7.2 The implications of the precautionary principle

First, what all sources seem to agree on is that the essence and aim of the precautionary principle is to solve the issue that follows with the inability to procure certainty of risk with the scientific knowledge we have today. Secondly, it is clear that the principle is a manifestation of the *in dubio pro natura* principle, and an attempt to concretise this in general international law. After this there are numerous different meanings on what the principle entails, which have been divided into four major groups for the purpose of this essay.

Starting with the burden of proof, in no resented cas has the principle been used by the court as a principle reversing the burden of persuasion, though it has often been invoked as such a principle by many parties in the disputes. It is clear that the principle is often used in this way in domestic law as well as in some MEAs but in doctrine, there is not a large number of authors taking this position. One of the exceptions is Dr Monika Ambrus who uses a fairness-based argumentation, which she claims proves that one could argue that the principle should be used in this way. Of course, this gives a good background on the actual use of the precautionary principle, but it is hardly an argumentation that could achieve success in a dispute before a court. Instead we are referred to the sources stated in the ICJ statute for determining the application of the principle which does not very well support this view of the principle.
The view that the precautionary principle entails a lower standard of proof than the one traditionally used in international environmental law seems to have much more support in legal doctrine. This is also closer to the frequently cited definition of the principle in article 15 of the Rio Declaration as this states that it is not acceptable to postpone preventive measures due to a lack of scientific certainty. The only way of effectively enforcing this seems to be an alleviation of the burden of proof for the applicant. Concerning the judicial decisions it seems rational to assume that, when the court does not clearly account for its decision on the burden of proof, such as in Southern Bluefin Tuna, it has used the general rule for placing the burden of proof. The reason the court judged in favour of Australia and New Zealand could simply be that they presented the evidence necessary to succeed in their argumentation.

There is of course always the argument that presenting sufficient evidence is hard for both parties in a dispute and many opponents of the principle claim that the evidentiary burden would be just as unfair on the other party was it reversed. Thus it is important that both sides acknowledge that science cannot give completely certain evidence, for neither side. Therefore it is up to the international community to set a reasonable standard of proof and place it on the party most suited to bear it.

The definitions set forth by Trouwborst on the precautionary rights and duties of states are very substantiated. They also correspond quite well with the definitions in many MEAs and seem to have large support in doctrine. The biggest uncertainty is the role of the international courts, which do not seem to have completely adhered to this interpretation as of yet. Also the fact that there are so many competing interpretations makes Trouwborst’s definitions weaker.

Lastly it can be pointed out that there is no clear view on how the different interpretations should be used. What is applicable in the creation of law? What can be invoked in an inter-state dispute? Are some parts of the principle only applicable on a domestic level? The use of different interpretations gives rise to a lot of questions and the need for further clarification by international courts seems a necessity in order to come to a conclusion considering what the precautionary principle entails.
8 Conclusion

Throughout this essay two main questions have been discussed, the first one being what status the precautionary principle has in international environmental law, and the second one being what the principle in that case entails. As stated in chapter 6, there are a lot of possible consequences, both advantages and disadvantages, of implementing the principle. Thus, it is important in environmental law to have good legal ground for the application.

In order to come to a conclusion on these questions, the requirements on a principle for it to reach the status of international customary law have been discussed. This was followed by an examination of the principle in terms of state practice and *opinio juris*. The main findings were that there are a lot of different definitions of the principle, making it hard to judge its status and that at least the more far-reaching definitions of the principle are not supported by international tribunals. It is, however, clear that the existence of the principle has attained more and more support, and perhaps it is just a matter of time before the precautionary principle has a natural place among binding environmental principles.

It is hard for humans to predict what is actually best for the environment, and it is equally hard to prioritise among different important interests. However, we need to do our best to preserve our planet for coming generations.

Conclusively, as judge Weeramantry said, already in his separate opinion on the Gabčíkovo-Nagymaros case: “International environmental law will need to proceed beyond weighing the rights and obligations of parties within a closed compartment of individual State self-interest, unrelated to the global concerns of humanity as a whole.”

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117 Separate opinion of judge Weeremantry in *Gabčíkovo-Nagymaros* p. 115
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