Approaches to Precaution
Application within the EU and WTO

1 Introduction

The precautionary principle (PP) is a key component of good environmental law. Designed to assist with decision-making under situations of scientific uncertainty, it maintains that a lack of scientific certainty or consensus should not block action being taken to protect the environment or public health. Essentially, it means in the face of unknown risks and potential harm, it is better to be safe than sorry.\(^1\) There are many different wordings of the PP, of which the European Environment Agency’s ‘working definition’ is perhaps most useful:

The precautionary principle provides justification for public policy and other actions in situations of scientific complexity, uncertainty and ignorance, where there may be a need to act in order to avoid, or reduce, potentially serious or irreversible threats to health and/or the environment, using an appropriate strength of scientific evidence, and taking into account the pros and cons of action and inaction and their distribution.\(^2\)

The PP is wide ranging: it works across many policy areas and at different stages in law and policy decision-making. Throughout, a robust application of the PP is vital to the protection of the environment. Examples of when a more precautionary approach would have reduced considerable damage to the environment or human health, such as asbestos, DDT, CFCs, and invasive species,\(^3\) demonstrate the importance of the principle to achieving robust environmental protection.

The PP is now a core component of international law in the fields of sustainable development, environmental protection, health and food safety.\(^4\) It is specifically referred to within international treaties and declarations, for example in the Rio Declaration on Environment and Development,\(^5\) the United Nations Framework Convention on Climate Change,\(^6\) and the Cartagena Protocol.\(^7\) Its operation and application can appear in a variety of ways within different places and contexts. This variability leads to multiple interpretations of the PP.

This briefing will demonstrate how the EU’s approach to precaution results in a more robust framework and consequently better environmental protection in comparison to the WTO system. It will show how the EU and WTO differ in their recognition of the PP, revealing how their associated legal regimes apply precaution in distinct ways, particularly in relation to precaution’s

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2 European Environment Agency, ‘Late lessons and early warnings: science, precaution, innovation’ (2013), 649
3 ibid
5 Rio Declaration on Environment and Development (1992), Principle 15
6 United Nations Framework Convention on Climate Change (1992), Article 3(3)
7 Cartagena Protocol on Safety to the Convention on Biological Diversity (2000), Article 1
legal significance, the permanence of measures, their treatment of scientific uncertainty and understanding of risk.

With the UK’s exit from the EU, the UK is at risk of adopting a weaker approach to precaution under pressure from interpretation of WTO rules by some of its members. This briefing argues that in order to maintain high environmental standards in the UK, the government must base its future policy making on its current approach to precaution as inherited from EU membership.

2 Application of the Precautionary Principle in the EU

The precautionary principle is a constitutional element of EU law: it is found in the EU Treaties that guide EU law’s interpretation in all situations. The PP is enshrined in Article 191(2) of the Treaty on the Functioning of the European Union (TFEU), which states: “Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle”. Both this overarching objective (high level of environmental protection) and the appearance of the PP are important cornerstones of EU law.

The PP is also explicitly included in a significant number of EU Regulations and Directives. For example, it appears in Article 1(3) of the REACH Regulation, whose “provisions are underpinned by the precautionary principle”, and in the Sustainable Use of Pesticides Directive, Article 2(3): “the provisions of the Directive shall not prevent Member States from applying the precautionary principle in restricting or prohibiting the use of pesticides in specific circumstances or areas”. The Court of Justice of the European Union (CJEU) has also engaged with the PP in a variety of cases, such as Pfizer, Waddenzee, and Artegodan.

The European Commission’s Communication on the PP establishes guidelines for implementation of the principle, noting that “recourse to the precautionary principle is a central plank of [EU] policy”. It states that application of the PP should be proportional to the chosen level of protection; non-discriminatory in its application (ie so comparable situations are treated similarly); consistent with similar measures already taken; based on an examination of the potential benefits and costs of (in)action (importantly not only economic costs and benefits); and subject to review in light of new scientific data. It also notes the PP should not only apply to environmental matters, but also in the contexts of consumer policy and the protection of human, animal and plant health.

Indeed, the PP underpins EU law across a wide range of policy areas. Its scope of application is both wide and deep as it is fully incorporated throughout many processes of policy and law

11 Case C-127/02 [2002] Waddenzee v Vogels
12 Case T-74/00 [2002] Artegodan v European Commission
13 European Commission, ‘Communication from the Commission on the precautionary principle’ COM(2000), 12
14 ibid p18: “Examination of the pros and cons cannot be reduced to an economic cost-benefit analysis. It is wider in scope and includes non-economic considerations.”
formation, implementation and enforcement, translating into a far-reaching and systematic regime for precautionary action across EU law.

3 Approach to Precaution in the WTO

In the WTO, elements that are traditionally recognised as belonging to precaution have been incorporated into the WTO’s Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement). The SPS Agreement sets out the right of each WTO Member to adopt measures that are necessary to achieve the level of sanitary and phytosanitary (SPS) protection it thinks appropriate.\(^{16}\) The idea of precaution is implicitly contained in Article 5.7, though it fails to explicitly recognise the PP itself:

In cases where relevant scientific evidence is insufficient, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information, including that from the relevant international organizations as well as from sanitary or phytosanitary measures applied by other Members. In such circumstances, Members shall seek to obtain the additional information necessary for a more objective assessment of risk and review the sanitary or phytosanitary measure accordingly within a reasonable period of time.\(^{16}\)

The WTO’s approach to precaution is influenced by its main function of ensuring that trade flows as smoothly, predictably and freely as possible.\(^{17}\) Due to this, WTO members must ensure SPS measures (including those taken for precautionary reasons) are not applied in a way that arbitrarily or unjustifiably discriminates between members, nor in a way that constitute(s) a disguised restriction on international trade.\(^{18}\)

As such, when WTO members determine the appropriate level of SPS protection, they must “take into account the objective of minimising negative trade effects”\(^{19}\) and must ensure measures are “not more trade restrictive than required”.\(^{20}\) As a result, precautionary measures are applied within a framework where liberalisation of trade is the priority. This represents a much more restrictive approach to precaution that falls short of the EU’s PP.

4 Comparing areas of divergence between the EU’s and WTO’s application of precaution

Below are the main ways the EU and WTO differ in their use of the PP.

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\(^{15}\) SPS Agreement (1 January 1995) LT/UR/A-1A/12 – Preamble and Article 2.1

\(^{16}\) ibid, Article 5.7


\(^{18}\) SPS Agreement, Article 2.3

\(^{19}\) ibid, Article 5.3

\(^{20}\) ibid, Article 5.6
4.1 Legal significance

One area of divergence between the EU’s and the WTO’s treatment of precaution is the different legal significance the two regimes give to precaution. As noted above, the PP is explicitly contained in the TFEU, the highest rank in the EU’s legal hierarchy. The EU regime thus views (and deploys) the PP as an important, indeed constitutional, legal principle that underpins all environmental law.

This is reflected in Waddenzee, a case before the CJEU which concerned application of the Habitats Directive. In particular, it considered the Directive’s requirement for public authorities to withhold authorisation of plans or projects until it has been determined that they will “not adversely affect the integrity of the [Natura 2000] site concerned”. Despite the Directive not explicitly referring to the PP, the CJEU read this to mean that a public authority must adopt a precautionary approach, finding that “it is clear ... the Habitats Directive integrates the precautionary principle”. Authorisation must be refused where “doubt remains as to the absence of adverse effects”, and it can only be given where “no reasonable scientific doubt remains as to the absence of such effects”.

This demonstrates the foundational role played by the PP in determining how EU environmental law should be interpreted, giving rise to a widespread application and high level of significance in EU law. This is bolstered by the overarching objective of a high level of environmental protection, as contained in the TFEU.

The WTO regime on the other hand does not explicitly refer to the PP and treats precaution in a rather less thorough way. The Beef Hormones case demonstrates the different understanding of the role of the PP by the WTO. The EU argued the PP, as a customary rule of international law or at least a general principle of law, was a valid basis on which to justify prohibitions of imports of beef produced in the US and Canada with artificial hormones where the impacts on human health were uncertain.

However, both the WTO Panel and Appellate Body found the PP “would not override the explicit wording of [the SPS] Agreement” and indeed failed to find any definitive status for the principle in international (environmental) law. They maintained the legal status of the PP was unclear and since it did not need to take a position on whether it was a recognised principle, they refrained from expressing a view on the issue. The WTO’s lack of acknowledgement of the PP

21 Case C-127/02 [2002] Waddenzee v Vogels
23 Waddenzee, paragraph 58
24 ibid 57
25 ibid 59
26 See, for example Cases T-429/13 and T-451/13 [2018] Bayer Syngenta v Commission
29 ‘Report of the Panel’ (18 August 1997) paragraph 8.249 (see also paragraphs 8.157ff); ‘Report of the Appellate Body’, paragraph 125
30 ‘Report of the Appellate Body’, paragraph 123
as a core legal principle contributes to it playing a weaker role in its legal reasoning and hence a lower level of priority afforded to environmental protection.

4.2 Permanence of measures

Another place of divergence between the EU and WTO’s application of the PP is the period of time during which precautionary measures can be implemented. Article 5.7 of the SPS Agreement states that adoption of SPS measures can only be applied on a “provisional” basis. They cannot be maintained unless the member seeks to obtain additional information and conducts a review within a “reasonable period of time”. This places additional restraints on the adoption of measures based on precautionary reasoning.

In contrast, the EU does not place such a strict time constraint on the operation of precautionary measures. Whilst there is an obligation to review and continue scientific exploration, measures can be implemented for as long as scientific information is inconclusive or incomplete and while the risk is still considered too high to be imposed on society.

The purpose of precaution is to justify (in)action when there are uncertain risks, and the appropriate precautionary measure may have to be implemented into the foreseeable future in order to be effective. Putting conditions on its length of application undermines its ability to provide environmental protection for as long as deemed necessary.

4.3 Treatment of scientific uncertainty

The PP should be applied in times when there is scientific uncertainty about the potential risks of an activity or substance. This can relate to uncertainty as to the likelihood, type, longevity or seriousness of a potential environmental harm. Therefore, the understanding and implications of scientific uncertainty are paramount to when and how the PP is applied.

The WTO adopts a more narrow stance for dealing with scientific uncertainty compared to the EU. WTO members are permitted to apply measures under Article 5.7 of the SPS Agreement when scientific evidence is insufficient. In the Japan–Apples case, the Appellate Body stated that “the application of Article 5.7 is triggered not by the existence of scientific uncertainty, but rather by the insufficiency of scientific evidence ... the two concepts are not interchangeable”.31 The WTO approach towards insufficiency may imply that further scientific evidence is always theoretically available and that greater certainty of the risks can be achieved through more scientific inquiry.

However, there is frequently uncertainty in science. As such, under scientific inquiry, varying strengths of conclusion can be drawn depending on a plethora of factors. This means that science (and indeed more scientific endeavour) cannot always be relied upon to provide conclusive information on complex environmental issues. The WTO’s requirement to continually seek further information, and the assumption that this will necessarily lead to more conclusive results, misses a key insight of the PP: that uncertainty will exist and this must not hamper sensible precautionary action. The WTO’s interpretation at times leans closer to prevention,

rather than precaution, as prevention only justifies action when the nature of the risk is already established.\textsuperscript{32}

In various EU regulations conversely,\textsuperscript{33} it is stated that it is in situations of scientific \textbf{uncertainty} where Member States can invoke the PP. As seen in the Commission guidance, uncertainty can arise from a range of factors and take many forms.\textsuperscript{34} For example, uncertainty can arise when there is insufficient scientific evidence, but also when there is a lack of agreement to the nature or scale of the adverse effects, and when a particular cause-effect relationship cannot be scientifically established.\textsuperscript{35} This creates a wider possibility for action than under the WTO.

\textbf{4.4 Beyond the PP: what is seen as ‘risk’}

Another difference in application between the EU and WTO lies in how they deal with risk. The EU’s approach places scientific risk assessment within a broader framework that also includes judgements about what is an acceptable risk for society. The Commission’s guidance states that “the appropriate response in a given situation is the result of an eminently political decision, a function of the risk level that is "acceptable" to the society on which the risk is imposed".\textsuperscript{36}

Whereas in the WTO system, Article 5.7 of the SPS Agreement requires members to conduct further scientific research in order to reach a “more objective” assessment of risk. However, making assessments about acceptable levels of risks are rarely purely objective based solely on scientific research.

Assessments of risk are founded on political, social, and methodological considerations that are often contextual, variable and subjective. The legitimate concerns and interests of the public also play an important role here. The EU takes a broad approach to understanding risk because it does not solely rely on scientific data to determine whether a product or process is a risk or not. For example, the significant public pressure created by the concerns regarding the safety of Bisphenol A (BPA) contributed to the decision to ban the chemical,\textsuperscript{37} despite a lack of agreement on the interpretation of risk assessment data. This highlights that while science must play an important role in risk assessment and decisions should be based on the best available science, it cannot provide all the answers as to what is an acceptable level of risk.

\textsuperscript{32} MM Mbengue and UP Thomas, ‘The precautionary principle: torn between biodiversity, environment-related food safety and the WTO’ (2005) 5 Int J Global Environmental Issues 36
\textsuperscript{34} Commission Communication (n13), pp13-14
\textsuperscript{35} See Science for Environment Policy, ‘The Precautionary Principle: decision making under uncertainty’ (Future Brief 18, produced for the European Commission 2017); EEA (n2) 649-58.
\textsuperscript{36} Commission Communication (n13), paragraph 5.2.1
\textsuperscript{37} See Milieu, ‘Considerations on the application of the Precautionary Principle in the chemicals sector’ (August 2011) p65 and Annex 1. The ban has been upheld by the CJEU – see case T-185/17 [2019] PlasticsEurope v European Chemicals Agency
5 Conclusion

Differences in the EU’s and WTO’s approach to precaution have ramifications for the level of protection for the environment. The WTO’s failure to explicitly recognise the PP, and weaker approach to precaution compares unfavourably to the EU’s more robust approach, where precaution is viewed as a priority that underpins all its decision-making.

Therefore, in the EU approach it is less likely that a potentially environmentally damaging process or product will be permitted. The evidence shows that the EU has restricted the use of more than 1,300 chemicals in cosmetics, but fewer than 50 have been restricted in the US.\(^\text{38}\) The EU also allows precautionary measures to be implemented for as long as deemed necessary, potentially indefinitely, in order to avoid environmental harm.

Post-Brexit, the UK needs to follow a strong, coherent, and systematic application of the PP that allows for potential environmental harms to be avoided when we have limited understanding of risks. This is necessary both in and of itself, and also in order to construct a progressive trade policy. The UK must be able to demonstrate to other WTO members that precautionary measures are not merely disguised protectionism. A robust domestic position will be key to protect public authorities from any deregulatory pressure they may feel under from trading partners or industry.

The UK should start from and build on its current approach to precaution, as inherited from the EU. This should be treated as a starting point from which the UK must not go backwards. The UK should give the best available science its proper role in decision making so that it is used to inform the development of law and policy, alongside other factors and views, in order to guide decision-making. This will help to ensure there continues to be a high level of environmental protection in the UK after Brexit.

ClientEarth is a non-profit environmental law organisation based in London, Brussels and Warsaw. We are activist lawyers working at the interface of law, science and policy. Using the power of the law, we develop legal strategies and tools to address major environmental issues.

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