



# A CISDL LEGAL BRIEF

## PRECAUTION IN INTERNATIONAL SUSTAINABLE DEVELOPMENT LAW

For the World Summit on Sustainable Development  
Johannesburg, South Africa, 26 August – 4 September, 2002

Debates on precaution are becoming legendary. Is it a solution to all environmental problems or an end to all economic activities? Evidently, it is neither. This legal brief<sup>1</sup> aims to clarify myths and de-emotionalize discussions, focusing on how the legal concept of precaution has evolved since the 1992 UNCED.<sup>2</sup> Based on a survey of recent analysis, this legal brief examines the nature of precaution with reference to its place in legal methodology and policy-making nature, its utility, and observations as to its present status in domestic and international law of sustainable development.

The first barrier to an informed discussion is considerable uncertainty as to terminology. There is a difference whether precaution is discussed specifically as an approach or principle. But essentially, the question of the legal validity of a precautionary principle *per se* has become less relevant internationally, as discussions focus more specifically on the scope and nature of precaution. The answers to these questions have to be scientific, and lawyerly.<sup>3</sup> First, in relation to precaution in international sustainable development law, there is a need for clarity about its nature and scope. Second, what is its application and implementation in international, regional or domestic law? Third, how to ensure that recognition of precaution does not undermine progress that has been made in international law over the past decade.

### What Does 'Precaution' Mean?

While risk assessment and management has taken place on national and international levels for many years, precaution as such was first articulated as a specific principle of environmental policy in Germany, the *Vorsorgeprinzip*. In this context, 'the precautionary principle' was meant to provide a more systematic response to the growing problem of scientific uncertainty in environment and health decision-making. The most familiar elaboration of a 'precautionary approach' can be found at Principle 15 of the non-binding 1992 *Rio Declaration on Environment and Development*: "In order to protect the environment, the precautionary approach should 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."<sup>4</sup>

---

<sup>1</sup> This brief is based on prior publications by the Centre for International Sustainable Development Law. The CISDL is based in Montreal, Canada, and is a new legal institute that examines areas of intersection between environmental, social and economic law. This brief was prepared by CISDL Commission member Markus Gehring of Germany, and CISDL Commission Director Marie-Claire Cordonier Segger of Canada. The CISDL Commission gratefully acknowledges advice from Tom Bigg of the United Kingdom, IIED, and Gaudenz Silberschmidt of Switzerland, ISDE.

<sup>2</sup> A more detailed overview of the development on precaution between Rio and Johannesburg provides the UNEP/Geneva Environment Network (GEN), *Precaution from Rio to Johannesburg*, Geneva 2002.

<sup>3</sup> The term "precautionary approach" is often used to underline disapproval of the term "precautionary principle." An 'approach' describes a legal technique to deal with uncertainties, scientific or otherwise, while a principle binds the actor (legislator, administration or judiciary) to apply these techniques. A new way to overcome this old dispute is to simply call for the implementation of precaution, a broader term which covers both. *Policies to Enhance Sustainable Development* (Paris: OECD, May 2001). The mere use of the word 'approach' or 'principle' does not indicate the status of precaution in international law, whether it is binding or not.

<sup>4</sup> *Rio Declaration on Environment and Development*, Principle 15, June 14, 1992, U.N. Doc. A/Conf. 151/5/Rev. 1 (1992), *reprinted in* 31 I.L.M. 876 (1992).

Since this consensus statement by over 130 governments, the precautionary approach, as one of the 1992 *Rio Declaration* principles, has gained increasing global acceptance in environment, social and economic policymaking at all levels. The 1998 *Wingspread Conference on the Precautionary Principle*<sup>5</sup> gathered health experts, who summarised four components that should guide its implementation:

- action to prevent harm despite uncertainty,
- shifting the burden of proof to proponents of a potentially harmful activity,
- examination of a full range of alternatives to potentially harmful activities, including no action,
- democratic decision making to ensure inclusion of those affected.

Simply stated, the precautionary principle means that proponents of activities which might lead to serious or irreversible damage are obliged to take or permit measures to be taken to prevent this damage (including halting proposed activities), in spite of lack of full scientific certainty as to the existence of the risk, its nature or the potential damage. An essential element of this technique is reversal of the burden of proof.<sup>6</sup> Recent analysis in the context of the WTO Committee on Trade and Environment deliberations has further defined the precautionary principle.<sup>7</sup> The work suggests that the principle reveals two distinct facets. First, there is the political *decision to act or not to act*, which is linked to the factors triggering recourse to the precautionary principle. Second, if an action is taken, the principle is meant to guide *how to act* (measures resulting from application of the precautionary principle). Increasingly, precaution (either as an approach or as a principle) has been reflected in international treaties, appearing with growing frequency and degrees of formal recognition in diverse domestic and international legal processes.

### How is Precaution Used in International Law?

Precaution is reflected in a growing body of international treaty regimes.<sup>8</sup> Customary law, as explained by the International Court of Justice,<sup>9</sup> is found in evidence of *opinio juris sive necessitatis* (the subjective belief by states that a principle is international law) and consistent, representative state practice. While it has been difficult to determine whether precaution has yet reached this status, it is clear that precaution is emerging as a guiding norm in international environmental law on a global level, and is also recognised in social and economic jurisprudence or policy making. As such, while differing views still exist on a global level, particularly in international economic debates, there is potential for eventual recognition through the incremental development of global customary laws. In terms of international precaution, many have argued that precaution is part of a developing body of international law, most evident as a guiding principle of international environmental law.<sup>10</sup> In international environmental law, governments everywhere are under an obligation to protect their citizens from harm caused by known and recognizable hazards which threaten life and property.<sup>11</sup> A principle was not explicitly stated in the majority judgement, but Japan was requested to suspend 'experimental' fishing (which had the potential to critically deplete stocks) on essentially precautionary grounds, and immediately and respectfully complied. The increasing recognition of precaution in national and international

<sup>5</sup> Gaudenz Silberschmidt, ISDE, *The Implementation of the Precautionary Principle as a topic of the European Environment and Health process*, submitted to the 3<sup>rd</sup> session of the EEHC in Dublin 29.11. - 1.12.2000.

<sup>6</sup> See leading works by Von Moltke, K. (Winnipeg: IISD, 2001 <iisd.ca>) and Stilwell, M. (Geneva: CIEL, 2001 <www.ciel.org>)

<sup>7</sup> Communication from the European Commission on the Precautionary Principle, EC COM 1 (2000), WTO document WT/CTE/W/147G/TBT/W/137 27 June 2000.

<sup>8</sup> Perrez, F. *Precaution from Rio to Johannesburg* (Berne: Geneva Environment Network, 2002).

<sup>9</sup> *Cases concerning North Sea Continental Shelf* [1969] I.C.J. Rep. 44. and *Right of Passage of Indian Territory (Portugal v. India)* [1960] I.C.J. Rep. 3

<sup>10</sup> See Freestone, D. and Hey, E. eds., *The Precautionary Principle and International Law. The Challenge of Implementation* (The Hague: Kluwer International, 1996).

<sup>11</sup> While the actual occurrence of harm may be unpredictable, harmful effects (including floods, droughts, fires, or pest outbreaks) are generally well-known. The usual response is prevention, supported by emergency measures. Precaution addresses the cases where lack of knowledge persists. As a principle or approach, it underlines that governments nowadays have an obligation to act, even in the face of enduring scientific uncertainty. It has been implemented in various legal instruments for sustainable development, and in particular in global climate change, ozone-depleting substances and biodiversity conservation. An indication can also be seen in the 1999 International Tribunal of the Law of the Sea (ITLOS) Southern Bluefin Tuna provisional order. See *New Zealand and Australia v. Japan, Cases 3 and 4, Order of 27 August 1999*, published at [www.un.org/Depts/los/ITLOS/Tuna\\_cases.htm](http://www.un.org/Depts/los/ITLOS/Tuna_cases.htm).

environmental law is well documented and can readily be traced in recent studies at the Organisation for Economic Cooperation and Development (OECD).<sup>12</sup> Key debates are reflected in answers the EC has given to a set of questions on the precautionary principle raised by the US.<sup>13</sup> It also can be argued that the precautionary principle exists in certain aspects of World Trade Organisation (WTO / GATT) law, and that it is being brought into WTO case law. If so, this is occurring with mixed results. The principle is clearly implied in the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (WTO SPS Agreement) and has been addressed in related Appellate Body (AB) and WTO Panel reports.<sup>14</sup> More tenuous references are also found in the Preamble of the WTO Agreement. The implication of precaution is explained by the AB in the Hormones report, which recognized ... "that there is no need to assume that Article 5.7 exhausts the relevance of a Precautionary Principle." In this report, it was recognised that Members have the "right to establish their own level of sanitary protection, which level may be higher (i.e. more cautious) than that implied in existing international standards, guidelines and recommendations." Furthermore, the AB accepted that "responsible, representative governments commonly act from perspectives of prudence and precaution where risks of irreversible, e.g. life-terminating, damage to human health are concerned."<sup>15</sup> The AB also stated that some regard the precautionary principle as having reached the level of custom in the field of international environmental law, but held that it would be unnecessary to take a position on whether this yet had been authoritatively formulated as a general principle of international customary law.

### Domestic and Regional Precaution Law:

Scientific uncertainty has become part of the entire body of "modern" domestic and international environmental law, as comprehensive legislation replaced traditional approaches to worker health and safety, the control of industrial facilities and land use planning. Since all governments face the dilemma of uncertainty in one form or another, the question is not whether precautionary measures are being taken but on what issues, on what basis, and with what safeguards to avoid arbitrary action. Overall positive and quite practical experiences with the principle may inspire international acceptance. No matter the approach, precaution identifies a common dilemma faced by all public authorities: how to deal with risks, primarily from technological developments, when the scientific basis is uncertain. Precaution has made its way into many countries domestic legal systems, and into some regional integration law. In **Germany**, the concept of "*Vorsorge*" is to be found in the 1974 *Federal Emission Protection Act*, an air pollution control law that doubles as the framework for general environmental policy.<sup>16</sup> In 1980, the West German Council of Experts for the Environment made it one of the cornerstones of a report on the North Sea.<sup>17</sup> By 1983, precaution was firmly established as one of the fundamental principles of German policy affecting health and the environment. In case law, it gained special importance in stricter air pollution standards to prevent acid rain and dying of forests.<sup>18</sup> High levels of support for precaution (as a principle) exists in the **European Union (EU)**, which has essentially adopted the precautionary principle in international law and practice for sustainable development.<sup>19</sup> The founding treaties of the EU now contain the precautionary principle. Its application as been largely confirmed and further developed by the European Court of Justice and the Court of First Instance.<sup>20</sup> The new Strategic Environmental Assessment is based

<sup>12</sup> See "Major National Environmental Laws, OECD Countries 1956-1978 and 1979-1984" in OECD, *The State of the Environment 1985* (Paris: OECD, 1985).

<sup>13</sup> [http://europa.eu.int/comm/food/fs/ifsi/eupositions/ccgp/ccgp01\\_en.html](http://europa.eu.int/comm/food/fs/ifsi/eupositions/ccgp/ccgp01_en.html)

<sup>14</sup> Noiville, C. "Principe de précaution et Organisation mondiale du commerce – Le cas du commerce alimentaire" *JDI 2000* (127).

<sup>15</sup> *EC Measures Concerning Meat and Meat Products (Hormones)*, adopted on 13 February 1998, WT / DS26 / AB /R, WT / DS48 / AB /R at para 123 - 124.

<sup>16</sup> Bundesimmissionsschutzgesetz—BImSchG, Art. 5.2: "Installations subject to authorization are to be constructed and operated in such a manner that ... 2. Precaution is taken against damaging environmental effects..."

<sup>17</sup> Rat von Sachverständigen für Umweltfragen, *Umweltprobleme der Nordsee* (Stuttgart: Kiepenheuer & Witsch, 1980).

<sup>18</sup> See Günter Hartkopf and Eberhard Bohne, *Umweltpolitik, vol. 1: Grundlagen, Analysen, und Perspektiven* (Opladen: Westdeutscher Verlag, 1983).

<sup>19</sup> See Sand, P. "The Precautionary Principle: Coping with risk" *IJIL 2000* (40); Martin-Bidou, P. "Le Principe de Précaution en droit international de l'environnement" *RGDIP, 1999* (103); Hans-Werner Rengling, H. "Bedeutung und Anwendbarkeit des Vorsorgeprinzips im europäischen Umweltrecht," *DVBL 2000*.

<sup>20</sup> *Art. 174 (2) EC Treaty* (2.10.1997 Treaty of Amsterdam); See ECJ case C-157/96 *National Farmers' Union and Others* [1998] ECR I-2211, Order of the Court of Justice in Case C-180/96 R *United Kingdom v Commission* [1996] ECR I-3903; judgement in Case C-183/95 *Affish v*

on the precautionary principle in the EU.<sup>21</sup> In **Canada**, the recent *Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)* case,<sup>22</sup> precaution was a major issue in deciding whether a town had the right to stop chemical spraying operations.<sup>23</sup> This *ratio decidendi* indicated a recent, further recognition of the precautionary principle, as such, in Canadian law. Precaution is also recognised increasingly by domestic courts in developing countries. The Supreme Court of **India** considers the precautionary principle to be part of the customary international law.<sup>24</sup> In **Costa Rica**, the Constitutional Court considered Principle 15 of the 1992 *Rio Declaration* and other international agreements provided sufficient justification to invalidate a regulation which permitted the killing of endangered sea turtles.<sup>25</sup> Another Constitutional Court decision discussed precaution in the context of uncertainty surrounding electromagnetic zones.<sup>26</sup> Precaution is not alien to the **United States** legal system, either.<sup>27</sup> However, on the domestic and international levels up to this point, the US has been very reluctant to accept the precautionary principle. This is probably due to fears that if the legal principle were to be recognised, there could be law suits where precaution had not been adopted. Even should these fears continue to influence US courts and policy makers, this does not hold back the incremental development of international law. Rather, the US might be described as a 'persistent objector'<sup>28</sup> and as such, precaution would not apply to their actions on an international level.

### Is Precaution in the Interest of Developing Countries?

Some countries in the WSSD negotiations might fear that precaution and any recognition of the development since Rio could jeopardize the position of developing countries. However, in specific international regimes negotiated or adjudicated in the past decade, developing countries have often fought hard for reference to precaution, in order to cope with lack of full scientific knowledge and certainty about the issues. Examples include on biodiversity and biotechnology, such as trade in and release of genetically modified organisms, chemicals, including hazardous wastes and substances, and in disputes concerning management of transboundary natural resources. There are hesitations about the use of precaution in international trade because the danger of providing a unilateral trade barrier exists if precaution is applied without internationally agreed guidelines of application. According to WTO Appellate Body

---

*Rijksdienst Keuring Vee en Vlees* [1997] ECR I-4315, at para 43; order of the Court of First Instance in Case T-136/95 *Industria del Frio Auxiliar Conservera v Commission* [1998] ECR II-3301. See, in particular, the orders in Case C-280/93 R *Germany v Council* [1993] ECR I-3667, and in Case C-335/99 P(R) *HFB and Others v Commission* [1999] ECR I-8705.

<sup>21</sup> See Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment, *Official Journal L 197*, 21/07/2001 P. 0030 - 0037, *preamble (1) paragraph*.

<sup>22</sup> 114957 *Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)* [2001] S.C.J. No. 42 (Quicklaw)

<sup>23</sup> L'Heureux-Dubé J. decided the case partly on the grounds that "[s]cholars have documented the precautionary principle's inclusion "in virtually every recently adopted treaty and policy document related to the protection and preservation of the environment." She went on to state that "[a]s a result, there may be "currently sufficient state practice to allow a good argument that the precautionary principle is a principle of customary international law" She therefore found that "[i]n the context of the precautionary principle's tenets, the Town's concerns about pesticides fit well under their rubric of preventive action."The S.C.C. cites D. Freestone and E. Hey, "Origins and Development of the Precautionary Principle", in D. Freestone and E. Hey, eds., *The Precautionary Principle and International Law* (1996). See also J. Cameron and J. Abouchar, "The Status of the Precautionary Principle in International Law" and O. McIntyre and T. Mosedale, "The Precautionary Principle as a Norm of Customary International Law" (1997), 9 J. Env. L. 221. where it is stated that "the precautionary principle has indeed crystallized into a norm of customary international law".

<sup>24</sup> See *A.P. Pollution Control Board v. Nayudu*, 1999 S.O.L. Case No.53, and *Vellore Citizens Welfare Forum v. Union of India*, [1996] Supp. 5 S.C.R. 241.

<sup>25</sup> Constitutional Court Voto No 1250-99 dated 19-2-99.

<sup>26</sup> Constitutional Court Voto de Minoría 2806-98 28-4-98

<sup>27</sup> There are numerous domestic environmental laws with a *precautionary purpose*, recognised by US courts, including the Endangered Species Act, National Environmental Policy Act, the Clean Air Act, the Federal Food, Drug and Cosmetic Act, the Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, the Comprehensive Environmental Response Compensation and Liability Act, and the Oil Pollution Act. See *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 178-88 (1978); *Reserve Mining Co. v. EPA*, 514 F.2d 492, 528 (8th Cir.1975); *Ethyl Corp. v. EPA*, 541 F.2d 1, 24-25 (D.C. Cir. 1976), *cert. denied*, 426 U.S. 941 (1976); *Lead Indus. Ass'n, Inc. v. EPA*, 647 F.2d 1130, 1152-58 (D.C. Cir. 1980), *cert. denied*, 449 U.S. 1042 (1980); *United States v. A&N Cleaners & Launderers*, 854 F.Supp. 229, 237-39 (S.D.N.Y. 1994); but see *Industrial Union Dept., AFL-CIO v. American Petroleum Institution*, 448 U.S. 607 (1980).

<sup>28</sup> *Case concerning Military and paramilitary activities in and against Nicaragua (Nicaragua v. Costa Rica)* [1986] I.C.J. Rep. 14, *Case concerning Continental Shelf (Libyan Arab Jamahiriya/Malta)* [1985] I.C.J. Rep. 29.

rulings precaution is already incorporated in the SPS Agreement, not alien to the world trade system.<sup>29</sup> In addition, many developing countries have deliberately incorporated precaution into their domestic law, or even into their constitutions. On a domestic level, precaution is in many areas a useful legal tool.

## Conclusions

Is precaution international law, and what is its precise formulation at present? In some areas, especially in specific areas of international law for sustainable development, such as straddling fish stocks or international chemicals management, it can be considered international customary law.<sup>30</sup>

In most other areas, especially at the area of intersection with international economic and social/human rights laws, it has been persuasively argued that this concept is *lex ferenda*, a principle in the rapid process of becoming international customary law, with persistent objectors properly on record. But essentially, the question of the legal validity of a precautionary principle *per se* has become less relevant internationally, as discussions focus more specifically on the scope and nature of precaution. The answers to these questions have to be scientific, and lawyerly. The application and implementation of precaution are key. It is important to ensure that formulations of the tool take into account international progress on its modalities since 1992. These were often carefully negotiated in the context of a particular sustainable development problem, and must be taken into account.

Overall, precaution can be supported as a reasonable, transparent policy tool for decisions being taken in the face of scientific uncertainty after assessments or evaluations have been carried out.

From an ISDL perspective, precaution is a principle at the intersection of three areas of law, within the broader rubric of international law for sustainable development. It can be useful and legitimate in social (health) or environmental law and policy, and certain formulations are increasingly recognised by economic (trade) law. As such, precaution is far from being vague or imprecise. It is a principle which demonstrates the characteristic of integration, holding potential to reconcile sometimes clashing interests for constructive, long term solutions to challenging policy dilemmas.

The Centre for International Sustainable Development Law (CISDL) is based in the McGill University Faculty of Law in Montreal, Canada, works in cooperation with the Université de Montreal Faculty of Law, and the Université de Québec à Montreal, with guidance from the three Montreal-based multilateral environmental accords (the NAFTA Commission for Environmental Cooperation, the UNEP Biodiversity Convention, and the Montreal Protocol multilateral fund). Its mission is to promote sustainable societies and the protection of ecosystems by advancing the understanding, development and implementation of international sustainable development law. CISDL convened Sustainable Justice 2002: Implementing International Sustainable Development Law in Montreal, June 13-15, 2002, as part of a legal partnership for sustainable development, and launches an International Jurists Mandate for the Implementation of International Sustainable Development Law (available at [www.cisdl.org](http://www.cisdl.org)), as well as a new book, *Weaving the Rules for Our Common Future*, at the WSSD.

CISDL Directors: Marie-Claire Cordonier Segger | Ashfaq Khalfan, [mcsegger@cisdl.org](mailto:mcsegger@cisdl.org) | [akhalfan@cisdl.org](mailto:akhalfan@cisdl.org)  
 Centre for International Sustainable Development Law, 3661 Peel St. Montreal, Quebec H3A 1X1 Canada  
 Tel: 001 514 398 8918 / Fax 001 514 398 8197 [www.cisdl.org](http://www.cisdl.org)

<sup>29</sup> See G. Marceau, *The precautionary principle under WTO Law*, in UNEP/Geneva Environment Network (GEN), *Precaution from Rio to Johannesburg*, Geneva 2002, at 23.

<sup>30</sup> Under the most restricted view, precaution is only relevant to scientific decision-making with regard to environmental concerns or the use of new technologies, at the moment of decision whether to proceed or not in cases where there is scientific uncertainty. However, a growing majority see the precautionary principle as a broader mechanism. Certain applications, such as the use of impact assessment procedures and consultation with affected parties in the case of transboundary projects, are likely to be required by international customary law.