Mc Graw Hill Education

# TAKING SIDES 立场

辩证思维训练

(美) THOMAS A. EASTON 编

## 环境篇

CLASHING VIEWS ON
ENVIRONMENTAL ISSUES

15 第15版 EDITION

Mc Graw Hill

外语教学与研究出版社

# TAKING SIDES 立场

辩证思维训练

# 环境篇

15TH 第15版 EDITION

CLASHING VIEWS ON

## ENVIRONMENTAL ISSUES



(美) THOMAS A. EASTON 编

外语教学与研究出版社
FOREIGN LANGUAGE TEACHING AND RESEARCH PRESS
北京 BEIJING

**京权图字：01-2014-1990**

Easton, Taking Sides: Clashing Views on Environmental Issues, 15e
ISBN: 0-07-351451-9


**图书在版编目（CIP）数据**

立场：辩证思维训练．环境篇：第15版：英文／（美）伊斯顿（Easton, T. A.）编．—北京：外语教学与研究出版社，2014.4
ISBN 978-7-5135-4420-7

Ⅰ．①立… Ⅱ．①伊… Ⅲ．①英语－语言读物 Ⅳ．①H319.4

中国版本图书馆 CIP 数据核字（2014）第 091153 号

出 版 人　蔡剑峰
责任编辑　刘　佳
封面设计　覃一彪
出版发行　外语教学与研究出版社
社　　址　北京市西三环北路 19 号（100089）
网　　址　http://www.fltrp.com
印　　刷　三河市北燕印装有限公司
开　　本　650×980　1/16
印　　张　15
版　　次　2014 年 5 月第 1 版　2014 年 5 月第 1 次印刷
书　　号　ISBN 978-7-5135-4420-7
定　　价　42.00 元

购书咨询：（010）88819929　电子邮箱：club@fltrp.com
外研书店：http://www.fltrpstore.com
凡印刷、装订质量问题，请联系我社印制部
联系电话：（010）61207896　电子邮箱：zhijian@fltrp.com
凡侵权、盗版书籍线索，请联系我社法律事务部
举报电话：（010）88817519　电子邮箱：banquan@fltrp.com
法律顾问：立方律师事务所　刘旭东律师
　　中咨律师事务所　殷　斌律师
物料号：244200001

# Contents

# ISSUE 1

# Should the Precautionary Principle Become Part of National and International Law?

YES: **Agne Sirinskiene**, from "The Status of Precautionary Principle: Moving Towards a Rule of Customary Law," *Jurisprudence* (October 2009)

NO: **Ken Cussen**, from "Handle with Care: Assessing the Risks of the Precautionary Principle," *Australasian Journal of Environmental Management* (June 2009)

## Learning Outcomes

**After reading this issue, you should be able to:**

- Define the precautionary principle.
- Explain why accepted definitions of the precautionary principle may not be adequate.
- Describe the values that affect the positions people take on the precautionary principle.
- Discuss the difference between the "hazard factor" and the "outrage factor" in people's perceptions of risk.

### ISSUE SUMMARY

**YES:** Agne Sirinskiene argues that the evidence from treaties, legislation, and court cases clearly indicates that the precautionary principle is becoming or has already become a rule of customary national and international law, and international applications of the principle are developing rapidly.

**NO:** Ken Cussen argues that the precautionary principle is so vague, ill-defined, and value-ridden that it is either vacuous or dangerous. Its underlying assumptions must be clarified before it can be used to guide public policy.

The traditional approach to environmental problems has been reactive. That is, first the problem becomes apparent—wildlife or people sicken and die, drinking water or air tastes foul. Then researchers seek the cause for the problem and regulators seek to eliminate or reduce that cause. The burden is on society to demonstrate that harm is being done and a particular cause is to blame.

An alternative approach is to presume that all human activities—construction projects, new chemicals, new technologies, etc.—have the potential to cause environmental harm. Therefore, those responsible for these activities should prove in advance that they will not do harm and should take suitable steps to prevent any harm from happening. A middle ground is occupied by the "precautionary principle," which has played an increasingly important part in environmental law ever since it first appeared in Germany in the mid-1960s. On the international scene, it has been applied to climate change, hazardous waste management, ozone depletion, biodiversity, and fisheries management. In 1992, the Rio Declaration on Environment and Development, listing it as Principle 15, codified it thus:

> 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.

Other versions of the principle also exist, but all agree that when there is reason to think—but not necessarily absolute proof—that some human activity is or might be harming the environment, precautions should be taken. Furthermore, the burden of proof should be on those responsible for the activity, not on those who may be harmed. This has come to be broadly accepted as a basic tenet of ecologically or environmentally sustainable development. See Marco Martuzzi and Roberto Bertollini, "The Precautionary Principle, Science and Human Health Protection," *International Journal of Occupational Medicine and Environmental Health* (January 2004).

The precautionary principle also contributes to thinking in the areas of risk assessment and risk management in general. Human activities can damage health and the environment. Some people insist that action need not be

taken against any particular activity until and unless there is solid, scientific proof that it is doing harm, and even then risks must be weighed against each other. Others insist that mere suspicion should be grounds enough for action. Sainath Suryanarayanan and Daniel Lee Kleinman, "Disappearing Bees and Reluctant Regulators," *Issues in Science and Technology* (Summer 2011), argue that existing risk assessment, particularly in the Environmental Protection Agency (EPA), is biased toward avoiding type I or false positive errors (which incorrectly identify a safe substance as dangerous) rather than type II or false negative errors (which incorrectly identify a dangerous substance as safe). Their particular concern is colony collapse disorder in honeybees, which may be due to exposure to certain insecticides; however, the EPA refuses to call those insecticides dangerous and regulate them accordingly because of a lack of rigorous, experiment-based scientific evidence. They prefer a more precautionary approach, which would shift the balance toward avoiding type II errors. That is, they would rather err by calling safe substances dangerous.

Since solid, scientific proof can be very difficult to obtain, the question of just how much proof is needed to justify action is vital. Not surprisingly, if action threatens an industry, that industry's advocates will argue against taking precautions, generally saying that more proof is needed. Those who feel threatened by an industry or a new technology are more likely to favor the precautionary principle; see John Dryzek, Robert E. Goodin, Aviezer Tucker, and Bernard Reber, "Promethean Elites Encounter Precautionary Publics: The Case of GM Foods," *Science, Technology & Human Values* (May 2009). The "Promethean Elites" are those who—like the Prometheus of myth—favor progress over the status quo and may argue that the precautionary principle holds back progress; see Helene Guldberg, "Challenging the Precautionary Principle," *Spiked-Online* (July 1, 2003) (http://www.spiked-online.com/Articles/00000006DE2F.htm). Yet, says Charles Weiss in "Defining Precaution," a review of *The Precautionary Principle*, UNESCO's World Commission on the Ethics of Scientific Knowledge and Technology Report, *Environment* (October 2007), the principle "is an important corrective to the pressure from enthusiasts and vested interests to push technology in unnecessarily risky directions."

Not everyone agrees. Ronald Bailey, "Precautionary Tale" (*Reason*, April 1999), defines the precautionary principle as "precaution in the face of any actions that may affect people or the environment, no matter what science is able—or unable—to say about that action." "No matter what science says" is not quite the same thing as "lack of full scientific certainty." Indeed, Bailey turns the precautionary principle into a straw man and thereby endangers whatever points he makes that are worth considering. One of those points is that widespread use of the precautionary principle would hamstring the

development of the Third World. Roger Scruton, in "The Cult of Precaution," *National Interest* (Summer 2004), calls the precautionary principle "a meaningless nostrum" that is used to avoid risk and says it "clearly presents an obstacle to innovation and experiment," which are essential. Bernard D. Goldstein and Russellyn S. Carruth remind us in "Implications of the Precautionary Principle: Is It a Threat to Science?" *International Journal of Occupational Medicine and Environmental Health* (January 2004), that there is no substitute for proper assessment of risk. Jonathan Adler, "The Precautionary Principle's Challenge to Progress," in Ronald Bailey, ed., *Global Warming and Other Eco-Myths* (Prima, 2002), argues that because the precautionary principle does not adequately balance risks and benefits, "The world would be safer without it." A. Benedictus, H. Hogeveen, and B. R. Berends, "The Price of the Precautionary Principle: Cost-Effectiveness of BSE Intervention Strategies in the Netherlands," *Preventive Veterinary Medicine* (June 2009), found that measures taken to control the spread of BSE or Mad Cow Disease are a very expensive way to protect human life. Peter M. Wiedemann and Holger Schutz, "The Precautionary Principle and Risk Perception: Experimental Studies in the EMF Area," *Environmental Health Perspectives* (April 2005), report that "precautionary measures may trigger concerns, amplify . . . risk perceptions, and lower trust in public health protection." Cass R. Sunstein, *Laws of Fear: Beyond the Precautionary Principle* (Cambridge, 2005), criticizes the precautionary principle in part because, he says, people overreact to tiny risks. John D. Graham, the dean of the Frederick S. Pardee RAND Graduate School, argues in "The Perils of the Precautionary Principle: Lessons from the American and European Experience," Heritage Lecture #818 (delivered January 15, 2004, at the Heritage Foundation, Washington, DC), that the precautionary principle is so subjective that it permits "precaution without principle" and threatens innovation and public and environmental health. It must therefore be used cautiously.

The 1992 Rio Declaration emphasized that the precautionary principle should be "applied by States according to their capabilities" and that it should be applied in a cost-effective way. These provisions would seem to preclude the draconian interpretations that most alarm the critics. Yet, say David Kriebel et al., "The Precautionary Principle in Environmental Science," *Environmental Health Perspectives* (September 2001): "environmental scientists should be aware of the policy uses of their work and of their social responsibility to do science that protects human health and the environment." Businesses are also conflicted, writes Arnold Brown in "Suitable Precautions," *Across the Board* (January/February 2002), because the precautionary principle tends to slow decision-making, but he maintains that "we will all have to learn and practice anticipation."

Does the precautionary principle make us safer? The January 23, 2009, issue of *CQ Researcher* presents a debate, under that title, between Gary Marchant, who believes that the principle "fails to provide coherent or useful answers on how to deal with uncertain risks," and Wendy E. Wagner, who contends that the existing chemical regulatory system shows the consequences of not taking a precautionary approach. Many people agree with Wagner, and indeed in many parts of the world the precautionary principle is well accepted. Should it become a recognized part of national and international law? In the following selections, Agne Sirinskiene, associate professor in the Faculty of Law, Department of Biolaw, Mykolas Romeris University, Vilnius, Lithuania, argues that the evidence from treaties, legislation, and court cases clearly indicates that the precautionary principle is becoming or has already become a rule of customary national and international law, and international applications of the principle are developing rapidly. Ken Cussen of the Graduate School of the Environment, Macquarie University, Sydney, Australia, argues that the precautionary principle is so vague, ill-defined, and value-ridden that it is either vacuous or dangerous. Its underlying assumptions must be clarified before it can be used to guide public policy.

**YES** 

**Agne Sirinskiene**

# The Status of Precautionary Principle: Moving Towards a Rule of Customary Law

## Introduction

Scientific uncertainty regarding the evidence of a link between human activity (as a cause) and its impact on the environment (as a consequence) has been an enormous obstacle for lawmaking in the area of environmental protection. This scientific uncertainty has further increased in the recent decades, as society began using advanced technologies, including biotechnologies. Their long-term impact on the environment and human health is mostly unknown since they have not been studied in longitudinal research. Therefore, some countries have taken "a precautionary" approach in their domestic law, which allows for decision-making in the area of environmental protection in case of scientific uncertainty regarding the evidence of cause and consequence. The Federal Republic of Germany has been a pioneer in the area of the "precautionary approach" towards the environment: they formulated the principle of precaution (*Vorsorgeprinzip*) in their domestic law in 1974. A decade later, in 1984, for the first time in history, an indirect reference to the precautionary principle was made in a non-binding international document—the Bremen Ministerial Declaration of the International Conference on the Protection of the North Sea. Consequently, the 1987 London Ministerial Declaration of the International Conference on the Protection of the North Sea already used the term "precautionary approach" explicitly. Although the precautionary principle has received wide international recognition, the status of this principle in law is still under debate. This suspends further application of the principle and allows for a discussion about the principle in the process of its development.

The main goal of this article is to analyse the current status of the precautionary principle in international law and its development into a rule

From *Jurisprudence*, vol. 4, issue 118, 2009, pp. 349–364. 

of international customary law. This entails methods of comparative and systematic analysis.

## The Influence of Problems in the Definition of the Precautionary Principle on the Interpretation of Its Status

The precautionary principle or "precautionary approach" is widely invoked in *soft law* (legally non-binding) documents and *hard law* instruments. According to D. Vanderzwaag, about 14 different definitions of the precautionary principle exist in international law. Such a variety of definitions has even prompted some researchers to assume that the lack of one unanimous definition is one of the properties of the precautionary principle. On the other hand, the variety of formulations is used by critics because it helps uncover problems in the application of the principle.

The most widely known definition of the precautionary principle can be ascribed to the 1992 Rio Declaration. Principle 15 of the Declaration states that "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." Similarly, the 1992 Framework Convention on Climate Change obliges participating parties "to take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of scientific certainty should not be used as a reason for postponing cost-effective measures." The term "approach" instead of "principle" is used in the preamble of the Convention on Biological Diversity (1992): "where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat." The UN Program for Further Implementation of Agenda 21 speaks of the progress made "in incorporating *principles* contained in the Rio Declaration . . . including . . . the precautionary principle."

The use of different terms and definitions is particularly problematic when interpreting the status of the precautionary principle. For example, in the case of *EC Biotech*, the United States (US) noted that it strongly disagrees that "precaution" has become a rule of international law and that the "precautionary principle" cannot be considered a general principle or norm of international law because it does not have a single, agreed formulation. According to the US, "quite the opposite is true: the concept of precaution has many permutations across a number of different factors. Thus,

the United States considers precaution to be an 'approach,' rather than a 'principle' of international law." In another statement at the World Trade Organization (WTO), the US stressed that, even if the precautionary principle were considered a relevant rule of international law under Article 31(3) of the Vienna Convention, it would be useful only for the interpretation of particular treaty terms, and could not override any part of the SPS (Sanitary and Phytosanitary) Agreement. This position is consistent in other cases as well where the US questioned whether "precaution" is a "principle." Consequently, the [US] does not consider the "precautionary principle" to represent customary international law. Such an interpretation of the status of the precautionary principle has been used by the US as a counterargument to the European Communities (EC) position that the precautionary principle is, or has become, "a general customary rule of international law" or at least "a general principle of law." Canada, in the *EC Hormones* case, took a middle position between the EC and the US. On the one hand, Canada declared that the "precautionary approach" is "an *emerging* principle of law" which may crystallize in the future into one of the "general principles of law recognized by civilized nations" within the meaning of Article 38(1)(c) of the Statute of the International Court of Justice. On the other hand, Canada agreed that the precautionary principle has not yet been incorporated into the corpus of public international law.

These arguments from two classical cases reveal that "approach" is generally seen as a softer version of "principle" in international law. This conclusion may also be supported by a case of the International Tribunal for the Law of the Sea (ITLOS), where Judge Laing expressed a dissenting opinion. Judge Laing stated that "adopting an approach, rather than a principle imports a certain degree of flexibility and tends, though not dispositively, to underscore reticence about making premature pronouncements about desirable normative structures." Another ITLOS [j]udge also associates the term "principle" with legally binding, customary status. Nevertheless, these separate opinions are only representative of the personal views of the judges participating in the said case. ITLOS as a tribunal has never made any statement explaining its position on the status of the precautionary principle. In a dispute between states, the World Trade Organization (WTO) Appellate Body also tried to avoid direct interpretation of the status of the precautionary principle and indicated that "it is unnecessary, and probably imprudent, for the Appellate Body in this appeal to take a position on this important, but abstract, question." The WTO Appellate Body limited itself by saying that "at least outside the field of international environmental law, the precautionary principle still awaits authoritative formulation." Thus, it was never acknowledged on the official WTO level that the precautionary

principle is "a general customary rule of international law" or even "a general principle of law." However, the statement that "at least outside the field of international environmental law, the precautionary principle still awaits authoritative formulation" may be interpreted as recognition that the precautionary principle may have the status of the principle in international environmental law.

It may also be acknowledged that certain formulations used in definitions of the precautionary principle also add to the discussions on the status of the principle. In some cases, definitions raise questions of whether they create obligatory rules. For example, some authors hesitate whether principles in the Convention on Climate Change, including the precautionary principle, create an obligation to the member states of the convention, because it is not clear what is meant by "the Parties shall be guided, *inter alia*." In addition, the text of the Convention uses "should" instead of "must": "the Parties should take precautionary measures to anticipate" (art. 3). The modal verb "must" expresses an obligation and implies that a verb used together with "must" definitely happens, while "should" implies that something may not happen. Another international instrument—the Convention on Biological Diversity—has a more abstract definition which may cause trouble for the implementation and interpretation of the principle. Article 6, General measures, in this legally binding document uses such formulas as "in accordance with its particular conditions and capabilities" and "as far as possible and as appropriate." These and other similar expressions determine that separate norms of legally binding documents have a limited normative character. For them to become effective, corresponding domestic laws or new international agreements must come into effect. This characteristic of the precautionary principle leads some authors to conclude that the precautionary principle is a long way from having legally binding force and stands at the beginning of the so-called "procedural" principles, which may help states to meet their obligations.

Nevertheless, it seems that doubts about the precautionary principle being a "principle" are more common to Anglo-Saxon tradition. The European Union (EU) law does not draw a clear difference between "principle," "approach," and "measures"; these terms are used in parallel to define the same principle and there is nothing to suggest that these three terms cannot be used interchangeably. The European Commission in Communication on the Precautionary Principle also does not differentiate among these terms and recognizes the precautionary principle as a full-fledged and general principle of international law or, as already discussed, even as a general customary rule of international law.

The status of the precautionary principle as a rule of customary law is significant because a rule of customary law creates obligations for all states,

except those that have persistently objected to the practice and its legal consequences. Therefore, in cases where the precautionary principle is recognized as a rule of customary law, the application of the principle would acquire a broader scope on the international level. This possible change would be in accordance with EU policy, clearly defined in the articles 6 and 174 of the *Treaty Establishing the European Community*. However, the EC has never explained its statements in the WTO and what reasoning lies behind them. The Communication on the Precautionary Principle and the jurisprudence of European Court of Justice also provide no answers. Bearing in mind this lack of legal certainty, the article will focus [on] further analysis on the criteria for the development of a rule of customary law and how they may be applied to the precautionary principle.

## Prerequisites for the Status of the Precautionary Principle as a Rule of Customary Law

The Statute of the International Court of Justice (art. 38, para. 1b) defines customary international law as "evidence of general practice accepted as law." The *Nicaragua* case and the *North Sea Continental Shelf* case complement this article of the Statute and clarify two requirements of customary international law. According to the International Court of Justice (ICJ), customary international law arises when nations follow a practice in an extensive and virtually uniform manner and this practice is followed with the conviction that it is obligatory to do so under international law (*opinio iuris*). Virtually uniform manner is not interpreted in such a way that absolutely all states are supposed to have the same practice during a clearly defined period of time. Consequently, the opposition of some states does not interfere with the development of a customary rule. State practice is usually assessed with the help of defined criteria that indicate how states articulate their recognition of a rule of customary law. These non-exhaustive criteria that serve as evidence of customary international law are: treaties, declarations, decisions of international and national courts, domestic legislation, opinions and statements of states during the preparation of treaties, correspondence between states, and even opinions of lawyers.

However, the best indicators of state practice remain the instruments of international law and state domestic law. As already discussed, there are about 14 different definitions of the precautionary principle in various legally binding and non-binding instruments of international law. The precautionary principle is widely used in agreements and declarations addressing such global problems as climate change, atmospheric and marine pollution, environmental protection and biodiversity and even in legal documents devoted to very specific regional problems such as tourism in Antarctica. After the Maastricht