THE PRECAUTIONARY PRINCIPLE

What is it and how has it been applied in Australian environmental law?
**What is the Precautionary Principle and how should it be applied to environmental law cases?**

The precautionary principle changes the automatic bias that a development should go ahead unless there are clearly proven reasons for limiting it. In Australia it is outlined as: “where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (Godden and Peel, 2011).” In Australian legislation, the precautionary principle is often not mentioned explicitly, but rather inferred through reference to Ecologically Sustainable Development (ESD) listed as one of a number of the Act’s objectives to which the decision maker should ‘have regard.’

The courts have found applying the precautionary principle less than straightforward, partly due to issues such as the burden and standard of proof. Australian case law suggests that the applicants challenging the development have the initial burden to show that it is likely that ‘serious or irreversible damage’ to the environment will occur if the development proceeds. If this threshold is satisfied, the respondent wishing to engage in the activity has the burden of proof regarding scientific questions and must outline the measures they will take to avoid serious or irreversible damage to the environment. If they are unable to disprove the possible environmental damage, then that is a factor to be considered in the cost/benefit analysis of the project (Godden and Peel, 2011:248, Stein, 1999).

Despite being included in most Australian environmental legislation (sometimes explicitly but often through reference to ‘Ecologically Sustainable Development principles’) the application of the precautionary principle in environmental decision making remains conspicuously rare (Herath and Prato, 2010:287). Many commentators argue that what is needed for the precautionary principle to be utilised more, and utilised well, is its inclusion in policy guidelines so that decision-makers can more easily apply it to specific situations (Precautionary Principle Project, 2005, Peterson, 2006, Herath and Prato, 2010).

On the other hand, some argue that the precautionary principle has been applied to environmental issues too much and that its application undercuts public confidence in science and technology. Furthermore, the reversal of the burden of proof is unfair for those promoting development, making it difficult for them to undertake projects where scientific uncertainty exists (O’Brien, 2000). These concerns appear to be misplaced, because even when a developer cannot satisfy the reversed burden of proof, scientific uncertainty alone does not mean that all developments must be halted for environmental protection. The decision-maker must then weigh actions to avoid possible environmental damage with social and economic factors and strike a balance between the seriousness of the threat and the cost of the precautionary action to society and the economy (Stein, 1999, Precautionary Principle Project, 2005).

Goldstein and Carruth (2004) argue that when taking a precautionary approach, it is reasonable to require that research also takes place to determine the effectiveness of the approach. This is particularly important if some development or technology has been erroneously linked to a negative side effect and in fact something else is the cause. Without research to validate the approach, applying the precautionary principle may cause further harmful delay in finding the true cause of the problem. Research estimating the value of precaution is more difficult to undertake when the possibly harmful activity is stopped before it even starts (Goldstein and Carruth, 2004:157).
This is a valid concern and one that international organisations such as the Precautionary Principle Project have recognised. They argue that in order to be implemented effectively, any precautionary approach needs to be monitored and researched in order to understand more about the threat and determine whether the precautionary approach is effective (Precautionary Principle Project, 2005).

How has the Precautionary Principle been applied in Australian cases?

There is no clear rule on the level of evidence required to meet the initial threshold from applicants challenging a development. Often in small-scale planning disputes where issues and uncertainties are reasonably straightforward, the courts require credible evidence of ‘serious and irreversible damage’, whereas in resource management issues involving complex ecosystems and information gaps, the courts have accepted a lower standard of evidence regarding threat, such as ‘a prospect of serious and irreversible damage’ which was applied in the Tuna Boat Owners case 1999 (SA) (Peterson, 2006:482). However, with no clear legal test, exactly how far applicants need to go to show ‘serious and irreversible damage’ is unclear.

The most quoted precautionary principle case is that of Leatch v National Parks and Wildlife Service (1993) 81 LGERA 270 in New South Wales. Justice Steinn applied the precautionary principle to overturn a decision approving a road on the grounds of uncertainty regarding its impact on an endangered frog community. He noted that applying the precautionary principle required balancing economic cost-benefit analysis, scientific uncertainty and social concerns and that applying the precautionary principle did not mean that a development had to have no risk, but that alternatives that protected the environment had to be considered (Peterson, 2006, Godden and Peel, 2011).

At the Commonwealth level, the Environment Protection and Biodiversity Conservation Act 1999 lists ESD as an objective of the Act and defines ESD and its key principles (including the precautionary principle.) Under S.391, the Minister is required to take into account the precautionary principle when making decisions on impact assessment and biodiversity protection (Stein, 1999:9).

Justice Dowsett of the Federal Court considered the precautionary principle in accordance with the Commonwealth Act in Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch v Minister for the Environment and Heritage and Ors [2006] FCA 736. In this case, the applicant argued that the decision-maker should not have allowed the development of two Queensland coal mines, as the clearing of both sites could negatively affect threatened communities, and more assessment of these effects was required. They also argued that the greenhouse gases released from coal extracted from the mines would contribute to global warming. Since the effects of global warming were predicted to be catastrophic on Australian national heritage sites with high biodiversity value such as the Great Barrier Reef, and national heritage sites were protected under the Act, the Minister was obliged to consider the adverse impacts from these mines on such sites. They claimed that the decision-maker did not consider the precautionary principle when approving the mines.

Justice Dowsett required the applicants to meet the highest threshold of showing credible evidence that the coal mines were likely to cause serious and irreversible damage, which the applicants could not do. They argued that it was inappropriate to identify the exact threats to national heritage and biodiversity caused by the emissions of the coal mines, given the cumulative nature of the threats posed by climate change. Dowsett J. found that the Act only required the decision-maker to have regard to the impact of the two specific coal mines, and that the applicants had not shown how
these coal mines would cause serious and irreversible damage to Australian national heritage sites listed under the Act.

This case required a very high threshold for the applicants in a matter involving complex ecosystems and information gaps, where in other such cases judges have allowed applicants to merely show ‘a prospect’ of serious and irreversible damage. There was no science available for the applicant to show with such certainty the exact effect of burning the coal from those particular mines on a cumulative issue like climate change. Thus even legislation that requires decision-makers to take into account the precautionary principle does not necessarily provide protection against small, incremental impacts.

Despite the widespread recognition of ESD and the precautionary principle at a formal level in Australia, at an institutional level its impact is less evident, and at the level of practice, there are very few examples where ESD and the precautionary principle have been effectively implemented. Cases such as Leatch appear to be the exception rather than the rule in the application of the principle to protection of biodiversity, with cases such as the ‘Wildlife Whitsunday’ case highlighting the continued difficulties of dealing with developments that incrementally damage biodiversity. While the principle changes the assumption of unrestrained freedom to exploit natural resources, clear guidelines on how decision-makers can implement it are required to ensure this assumption is actually changed in practice.

References


Case law