# The Precautionary Principle



### Frequently Asked Questions about the Precautionary Principle

#### Is the precautionary principle scientific?

Because of the great uncertainties about cause and effect, all decisions about human health and the environment are value-laden and political. The precautionary principle recognizes this and it exposes uncertainty and admits the limitation of science. This is a "sounder" kind of science. Precaution does not call for less science, but more – to better understand how human activities affect our health and environment. But the need for better understanding must not prevent immediate action to protect ourselves and future generations.

## So, would the precautionary principle ban all chemicals and halt development sending us back to the stone age?

Precaution would explore alternatives – better, safer, cheaper ways to do things – and the development of cleaner products and technologies. Some technologies and developments may be brought onto the marketplace more slowly. Others may be phased out. Those proposing potentially harmful activities would have to demonstrate their safety and necessity up front. On the other hand, there will be many incentives to create new technologies that will make it unnecessary to produce and use harmful substances and processes.

## But naturally occurring substances and disasters harm many more people than do industrial activities.

We must deal with the hazards for which we are responsible and over which we have control. An important reason for precaution is that we do not yet know – and may never know – the full extent of the harm caused by human activity. Some violent natural events, for example, may be a result of global warming which in turn is linked to human activity.

#### You can't prove anything is safe.

It is possible to demonstrate that there are safer alternatives to an activity.

#### You could say that every activity has some impact. Every chemical is toxic at some dose.

Almost all human or industrial activities will have some impact on ecosystems. The virtue of the precautionary principle is to continuously try to reduce our impacts rather than trying to identify a level of impact that is "safe" or "acceptable".

## So how do we move from a risk assessment-based approach to industrial and government policies to a precautionary approach?

First, we recognize that sufficient evidence of harm should be a trigger to investigate safer alternatives. We involve more people in the decision-making process rather than just government or industry scientists. In addition, we ask the bigger questions about technology and materials, such as 'who benefits' and 'who loses' from this new technology or proposed action. More importantly, we need to ask what function a chemical or process performs and are there better, safer ways to meet that function? We need to put more resources into clean production, renewable energy systems, and financial systems that promote equitable and sustainable societies. Finally, we need to recognize that the living planet we inhabit has its own ecological cycles and systems, which can be our sustenance into the future if we learn to understand and respect this.