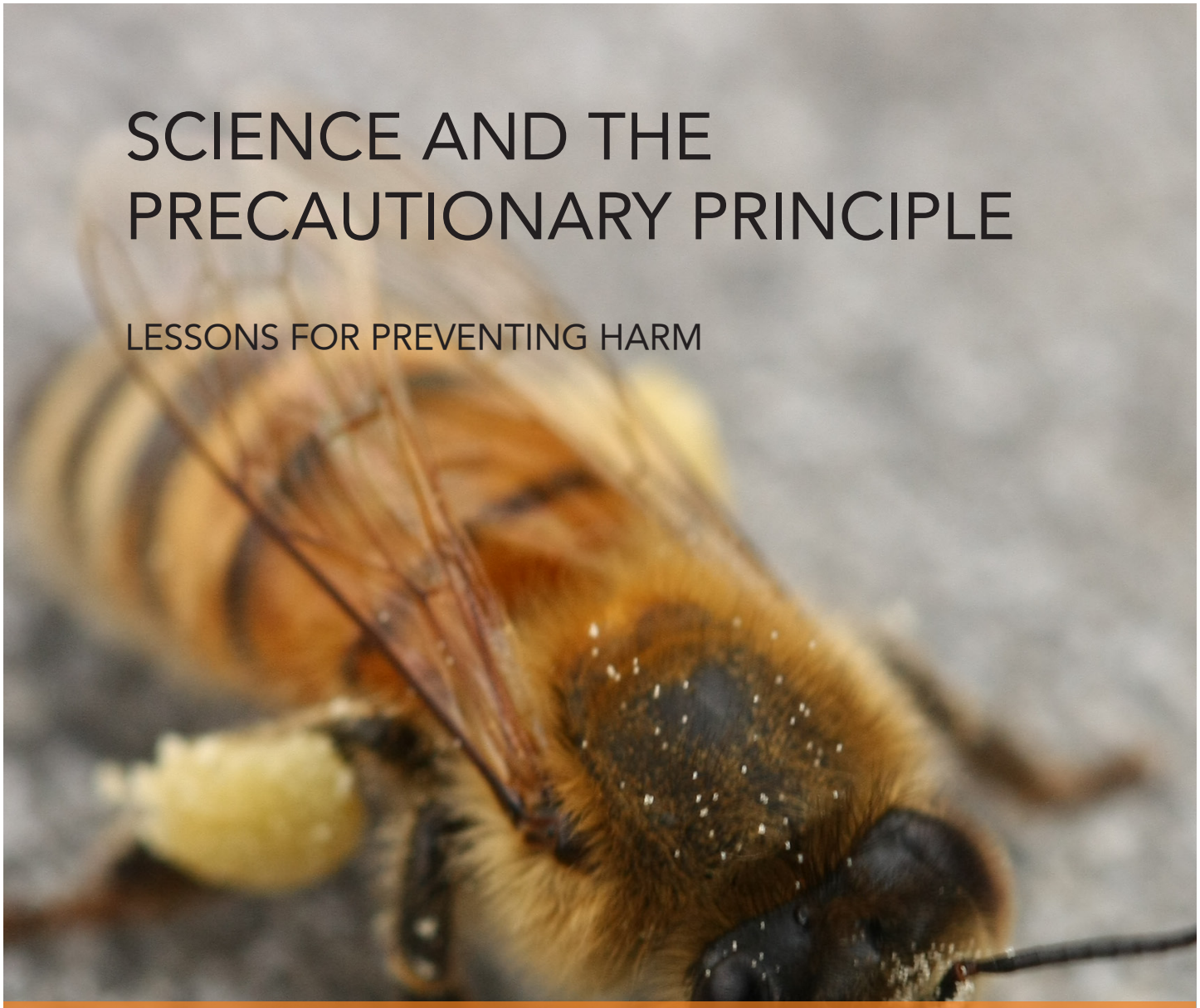

SCIENCE AND THE PRECAUTIONARY PRINCIPLE

LESSONS FOR PREVENTING HARM

THE EUROPEAN ENVIRONMENT AGENCY WILL PUBLISH A NEW REPORT *LATE LESSONS FROM EARLY WARNINGS: SCIENCE, PRECAUTION, INNOVATION* — REGISTER YOUR INTEREST NOW

With much scientific uncertainty about the real impact of new products and technologies, policy-makers face difficult decisions, particularly when they have to deal with powerful commercial interests and economic trade-offs. The backstories of some widely used innovations of the past, such as leaded petrol, mercury products, DBCP pesticide, vinyl chloride, DDT, tobacco, and fossil fuel energies are used to derive lessons for handling current and emerging innovations and issues, such as nicotinoid pesticides, BPA, mobile phones, nano products, GMOs, alien species, and ecosystems resilience. Both historical and current chapters provide unique insights into how the precautionary principle has been applied or ignored, and the consequences. The report concludes with ideas for maximising innovations and minimising harms.

European Environment Agency

Science and the precautionary principle — lessons for preventing harm

Societies may be considerably more successful at maximising the net benefits from innovation if they take more account — scientifically, politically and economically — of the rich body of information available from a greater range of diverse sources. The 'Late Lessons Project' illustrates how damaging and costly the misuse or neglect of the precautionary principle can be, using case studies and a synthesis of the lessons to be learned and applied to maximising innovations whilst minimising harms.

Lessons from a history of hazards

The EEA published *Late lessons from early warnings: the precautionary principle 1896–2000* in 2001.

There have been many beneficial innovations. Others have been disastrous. In today's globalised world, ill-conceived innovations can have a huge impact on health and environment.

'Late Lessons' asked whether we could become better at assessing the pros and cons of innovations, and taking action early enough to prevent harm.

Twelve key lessons for better decision-making were drawn from cases where public policy was formulated against a background of scientific uncertainty and 'surprises' — and where clear evidence of hazards to people and the environment was often ignored.

The case studies addressed:

- Fish stocks;
- Medical radiation;
- Benzene;
- Asbestos;
- PCBs;
- Halocarbons and the ozone 'hole';
- DES pregnancy pills;
- Antibiotics as animal growth promoters;
- Sulphur dioxide and acid rain;
- MBTE in petrol;
- Contamination of the Great Lakes;
- TBT marine antifoulants and sex change in sea snails;
- Hormones as growth promoters;
- Mad cow disease.

Better science and decisions for the future?

The EEA will publish volume 2 of *Late lessons from early warnings: science, precaution, innovation*. It will assess the use of scientific evidence and the precautionary principle across a wide range of human health and ecosystem case studies. Unlike volume 1, the new report will also cover some current and emerging issues.

Chapters will address:

- The precautionay principle;
- Lead in petrol;
- Mercury pollution of Minamata Bay and beyond;
- DBCP pesticide and male infertility;
- The pill and feminised fish;
- Bisphenol A and harm to children;
- DDT;
- Booster biocides: an alternative to TBT;
- Climate change;
- Floods;
- Ecosystems and resilience;
- Perchlorethylene and drinking water;
- Beryllium exposure in the nuclear industry;
- Vinylchloride;
- Environmental tobacco smoke;
- Nicotinoid pesticides and the French bee decline;
- Nanotechnology;
- Genetically modified organisms;
- Mobile phones-head cancer link;
- Nuclear accidents;
- Invasive alien species;
- Economic costs of inaction;
- False positives;
- Lessons for science;
- Knowledge into action ;
- Governance of innovation;
- Why does business ignore early warnings;
- Progressive business and long finance;
- Towards better victim compensation and protection of early warning scientists.

More information

Volume 1:
Late lessons from early warnings: the precautionary principle 1896–2000 can be downloaded at http://reports.eea.europa.eu/.

Order a free printed copy from the EU Bookshop online: http://bookshop.europa.eu.

Volume 2:
To receive a notification of when it is possible to order free copies of volume 2 *Late lessons from early warnings: science, precaution, innovation*, please send an email to: Marisa.Turanzas@eea.europa.eu.

European Environment Agency
Kongens Nytorv 6
1050 Copenhagen K
Denmark

Tel.: +45 33 36 71 00
Fax: +45 33 36 71 99

Web: eea.europa.eu
Enquiries: eea.europa.eu/enquiries

European Environment Agency