

# OTHER INTERNATIONAL DEVELOPMENTS

## OECD

### Environmental Outlook Published

The key message of the *Environmental Outlook*, issued by the Organisation for Economic Co-operation and Development (OECD) is that governments from OECD countries\* need to take action urgently to change their policies in a number of clearly identifiable areas, in order to prevent irreversible damage to the environment over the next 20 years. The *Outlook* is a pioneering 20-year projection of OECD environmental problems that identifies realistic priorities for addressing the main challenges.

Using an economy-based vision of developments to 2020, the Study identifies the drivers of environmental change (the economy, population, globalisation, *etc.*), the specific sectors that put the greatest pressure on the environment, and the resulting environmental impacts. Based

on the findings, the most critical environmental concerns facing OECD countries are the unsustainable use of renewable natural resources, the degradation of ecosystems and the disruption of the environmental systems that support human life. Some of the most urgent problems are identified as “red lights” for the future. These include:

- Three-quarters of marine fisheries are fished to their limits or over-fished.
- Tropical deforestation continues at alarming rates. Non-OECD regions will lose another 10 per cent of their forests by 2020.
- Human-induced climate change already affects weather patterns worldwide. This will worsen as OECD CO<sub>2</sub> emissions increase by a projected one-third to 2002.
- Urban air quality and associated health problems are deteriorating in many OECD countries.
- Energy use and transportation are already the main contributors to greenhouse gas emissions and air pol-

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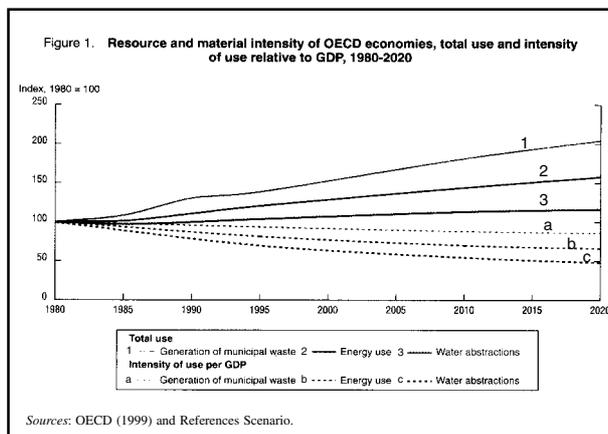
\* Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States.

lution. Motor vehicle use in OECD countries is expected to increase by 40 per cent by 2020, passenger air kilometres to triple, and energy use to increase by 35 per cent.

- Municipal waste generation is expected to increase substantially in OECD countries by 2020.
- In most OECD countries, groundwater is polluted largely by farm chemicals. By 2020, nitrogen loading of waterways from agriculture will increase in OECD countries by more than one-quarter.
- Persistent and toxic chemicals will be widespread in the environment, seriously affecting human health.
- Overall, environmental damage is responsible for 2-6 per cent of disease in OECD countries.

The *Environmental Outlook* has proposed how some of these trends could be reversed. It suggests a range of policy options to address the “red light” concerns and – through modelling simulations of specific policies – analyses their potential environmental and economic effects.

For each of the “red light” issues examined in the *Outlook*, examples of appropriate policy instruments for addressing the problem are identified, and – where possi-



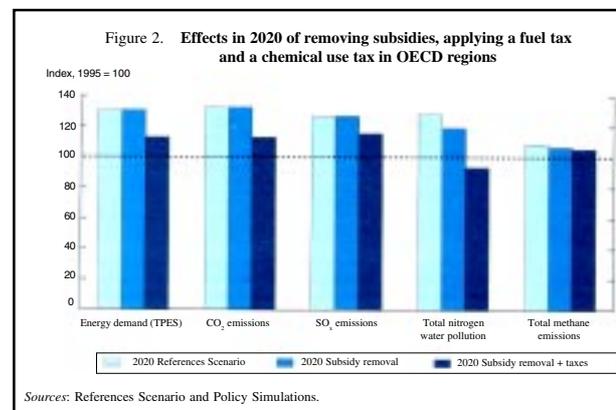
Courtesy: OECD Environmental Outlook

ble – their potential effects are quantitatively assessed. The Report outlines a “policy package” or combination of instruments – regulatory, economic, and others – which can be used to tackle many of the most pressing environmental problems. It is often difficult to design a single policy instrument that will successfully provide the right incentives for a total reduction in pollution and waste generation. Instead, it will generally be necessary to employ a mix of policy instruments. The policy mix suggested in the report involves the combination of a robust regulatory framework with a variety of other instruments, such as stronger pricing mechanisms to influence the behaviour of consumers and producers, voluntary agreements, tradable permits, eco-labels and information-based incentives, land use regulation and infrastructure provision. In particular, the *Outlook* recommends the removal of environmentally harmful subsidies and a more systematic use of environmental taxes, charges and other economic instruments to get the prices right.

The policies suggested draw on lessons learned from environmental success stories, such as the virtual elimination of ozone-depleting CFC emissions, the removal of lead from petrol, the expansion of protected natural areas, and significant increases in the efficiency of resource and energy use. However, despite improvements in resource efficiency, overall environmental degradation has persisted in most areas as the volume effects of total increase in production and consumption have outweighed the resource efficiency gains per unit of product (see fig. 1). Following recent trends, OECD countries are expected to reduce the energy intensity of their economies by 20 per cent by 2020, while increasing total energy use by 35 per cent (see fig. 2). Even with the use of new, more efficient, energy and transport technologies, it is unlikely that total emissions from these sources will decrease much over the next two decades. OECD countries will need to achieve more significant changes in the fuel mix than are currently foreseen, with greater substitution of the more polluting fossil fuels with renewable resources and cleaner fuels.

Countries know that the effects of implementing these policies would be significant. Removing subsidies in OECD countries by applying an energy tax linked to the carbon content of fuels and taxing all chemicals could lead to 15 per cent lower OECD CO<sub>2</sub> emissions in 2020 than would have been the case in 2020 under business-as-usual assumptions; 9 per cent lower SO<sub>2</sub> emissions; 3 per cent lower methane emissions; and 30 per cent less runoff of nitrogen to waterways from fertilisers.

A policy simulation was undertaken to examine the potential effects of some of the key elements of the combined policy package: namely, the removal of all the subsidies identified in OECD countries, the application of an energy tax linked to the carbon content of fuels, and a tax on all chemical use. The environmental benefits from this policy mix would be substantial (see fig. 2). With this policy package, the economic costs of achieving these environmental benefits were estimated to be quite low – less than a 1 per cent decrease in GDP (Gross Domestic Product) for OECD regions overall in 2020 compared with the Reference Scenario. Thus, implementing such a policy package would be cost-effective and lead to significant environmental improvements by 2020. (MJ)



Courtesy: OECD Environmental Outlook