Air pollution—crossing borders

A silent killer responsible for more deaths than the number from HIV/AIDS, tuberculosis, and road injuries combined. A killer indifferent to political agendas and that cannot be contained by borders. Air pollution is associated with around 6·5 million deaths each year globally. While premature deaths from household air pollution are projected to decline from 3·5 million today to 3 million by 2040, premature deaths from outdoor pollution are set to rise from 3 million to 4·5 million in the same period. Transformative action is needed to mitigate this death toll.

There is a dearth of information available on the health effects and economic impact of environmental pollution. Proven solutions are available, but implementation remains a challenge that requires coordinated efforts across sectors and nations. A report by the World Wildlife Fund’s European Policy Office, Climate Action Network Europe, the Health and Environment Alliance, and Sandbag has, for the first time, quantified the cross-border health effects of air pollution from coal use in electricity generation in the European Union (EU), estimating total associated economic costs of up to €62·3 billion. The report aims to promote debate on the rapid phase-out of coal-burning power generation and calls for action at the national and EU level. Toxic particles created by burning coal can be carried beyond the borders of the countries where the power plants are situated. In France, where coal burning is low, 1200 premature deaths a year are caused by air pollution from the Czech Republic, Germany, Poland, Spain, and the UK. The cross border nature of coal pollution highlights the need for governments to work together to urgently phase out coal burning.

The need for cooperation is reiterated in a special report on Energy and Air Pollution from the International Energy Agency (IEA), which campaigns for global action to overcome the negative environmental effects of energy use. The report cites energy production as the most important source of air pollution coming from human activity and presents strategies to tackle energy poverty in developing countries, reduce pollutant emissions through post-combustion control technologies, and promote clean forms of energy.

The Clean Air Scenario presented by IEA uses benchmarks for air quality goals, such as WHO guideline levels, to set long-term targets. Strategies outlined for the energy sector are adapted to different national and regional settings. In developing countries in Asia and sub-Saharan Africa, a notable health impact arises from smoky environments caused by use of wood and other solid fuels for cooking; whereas power plants, industrial facilities, and vehicle emissions are the main causes of outdoor pollution in many high-income countries. Cities in particular are susceptible to becoming pollution hotspots due to concentrated populations, energy use, and traffic.

Although the report takes important steps in tailoring policies to local and national conditions, the proposals are not ambitious enough. For example, the report sets out a scenario in which the number of people being exposed to fine particulate matter levels above the WHO guideline in the EU will be less than 10% by 2040. Yet in the USA, average air pollution limits are already below national limits, having declined by 70% since 1970 despite growth in population levels and energy consumption. Setting half-hearted goals as far ahead as 2040 will only widen the gap between the USA and the rest of the world. The report recognises the need for clearly defined responsibilities, reliable data, and a focus on compliance and policy improvement to keep strategies on course. However, long-term goals can be easy to forget or conveniently ignore, particularly if the issue is allowed to slip down the political agenda. Now is not a time to become complacent, but to match the strides being made by the USA in improving air quality.

The Lancet, the Global Alliance on Health and Pollution (GAHP), and the Icahn School of Medicine at Mount Sinai, with coordination from the UN Environment Programme and the World Bank, have united to produce a Commission on Pollution, Health, and Development. The aim of the Commission is to inform key decision makers globally of pollution’s severe and under-reported contribution to the global burden of disease and to present available pollution control strategies and solutions, dispelling the myth of pollution’s inevitability and combating apathy. In a turbulent political climate, environmental pollution must not be allowed to fall by the wayside. Policies should take centre stage and nations must come together in a spirit of mutual cooperation to tackle air pollution. ◼ The Lancet