

Preface

Air pollution is the cause of alarming numbers of premature deaths, as well as serious impacts on human health and the environment. This report sheds new light on the economic consequences of significant increases in outdoor air pollution that will occur if policies are not strengthened. Unless we clean up the air, by the middle of the century one person will die prematurely every 5 seconds from outdoor air pollution. The associated costs to society are rising rapidly. Urgent action is needed to prevent these projections from becoming a grim reality.

This report presents the first comprehensive assessment of the economic consequences of outdoor air pollution in the coming decades. First, it provides a global outlook to 2060 for the major impacts of increased air pollution on human health and agriculture: numbers of premature deaths, cases of illness and loss of agricultural yields. Second, it uses a detailed modelling framework, the OECD's ENV-Linkages model, to calculate regional and global economic costs related to those impacts that can be linked to markets, such as changes in health care expenditures, labour productivity, and agricultural production. Finally, valuation techniques are employed to assess the welfare costs of outdoor air pollution relative to the costs of premature deaths as well as pain and suffering from illness. Together, these provide a unique insight into the global and regional costs of inaction on outdoor air pollution.

Further degradation of the environment and natural capital can compromise prospects for future economic growth and human well-being. In order to assess the feedbacks from the environment on economic growth, modelling tools used for projecting future pathways of economic activity need to be able continually to assess how different environmental impacts affect various elements of the economic system. This is the ambition of the OECD's CIRCLE project. The modelling tools underlying this report contribute to this ambition by quantifying the full cycle of economy and air pollution linkages. This allows a much more elaborate quantitative assessment of the economic consequences of outdoor air pollution.

This report focuses on highlighting how outdoor air pollution may grow into an even more severe global problem unless governments act decisively. For the first time, it brings together detailed projections on the global biophysical consequences of policy inaction until 2060 with severe consequences for economies and well-being around the world. Significant uncertainties remain in the valuation of the welfare costs of premature deaths and illness, but it is certain that millions of lives will be at risk and economies will be worse off unless more ambitious policy action is taken. The OECD recognises this and urges countries to act. We need better air pollution policies for longer and healthier lives.



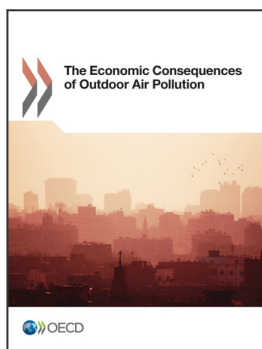
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