

Executive Summary

Policy coherence implies mutually reinforcing policy actions across government departments and agencies in one or several countries. Advocates of policy coherence stress the systematic promotion of opportunities to create synergies towards achieving particular objectives in different policy domains. For objectives concerning economic development and the environment, policy coherence would involve avoiding policies that serve to provide a short-term boost to growth, but at the cost of environmental damage that would be (predictably) regretted in the long term. In some cases, this environmental damage can lead to adverse effects on longer-term economic growth. At the OECD, two particular aspects of policy coherence for development have been emphasised: *i*) internal, *i.e.* within development co-operation; *ii*) intra-country, *i.e.* national aid and non-aid policy coherence. Much of the work reported below falls within these categories.

This report uses the modelling framework that underpinned the *OECD Environmental Outlook to 2030* (EO). It comprises the ENV-Linkages computable general equilibrium model coupled with the Integrated Model to Assess the Global Environment (IMAGE) and the Timer Image Energy Regional (TIMER) model - both developed at the Netherlands Environmental Assessment Agency (MNP) - with some input from a Global Trade Analysis Project (GTAP) agricultural-economy model developed at the Agricultural Economics Institute of the Netherlands. Macroeconomic variables from ENV-Linkages and population variables from the United Nations 2004 Medium Variant projections are inputs to the other models. The baseline used is policy-neutral, *i.e.* it assumes no new policy action; however modest improvements in environmental policies in developing countries and equipment modernisation entailing greater use of less-polluting technologies are assumed to lead to some reductions in emission coefficients over time.

Developing and transition economies have been disaggregated to include the 6 individual BRIICS countries (Brazil, Russia, India, Indonesia, China and the Republic of South Africa) and 9 sub-regions. The sectoral breakdown comprises 30 sectors including four sectors particularly important for simulation of policy coherence, *i.e.* vegetables and fruits; plant-based fibres; refined sugar; and textiles and wearing apparel. This permits some analysis of such issues as end of European Union (EU) tariff preferences for bananas, suppression of OECD domestic support measures for cotton and sugar, as well as the impact on trade shares of the recent implementation of the Uruguay Round liberalisation of textiles and wearing apparel.

The report highlights that on the basis of a “no policy change” baseline scenario, developing countries, especially larger ones, will account for increasing shares of world economic activity, including in environmentally sensitive sectors, and large increases in absolute levels of production will cause a number of environmental pressures to increase as well. Environmental quality in developing countries is thus projected to worsen in a number of ways, as it does at the global level, imperilling prospects for sustained economic growth in certain developing countries regions.

The report also describes nine “single policy change” simulations that illustrate the need for “joined-up” policies. Further trade liberalisation - unless accompanied by improved environmental policies - can increase environmental pressure in both OECD and developing countries because they lead to increases in the output of environmentally sensitive goods and services. Measures to improve environmental outcomes taken by OECD countries can have unintended consequences for growth in developing countries, including potentially adverse impacts as illustrated by the simulations described in this report. Measures taken by developing countries to increase their own rates of economic growth can also increase environmental pressures. Indeed, the two simulations illustrating the potential impact of policy measures that developing countries can take on their own had much larger impacts on their economic growth than the simulations illustrating the impact of increased aid or greater trade liberalisation. This finding underscores the need to integrate environmental considerations into national planning and development co-operation, and thereby to invest some of the “growth dividend” in environmental protection, which in turn can help to support more sustainable economic growth over the long-term.

Even measures taken to address problems seemingly unrelated to economic development or environmental protection, such as improving pension fund viability by increasing work effort and, thus, economic growth, can have knock-on effects that can increase environmental pressure worldwide. For these reasons, integrated policy approaches are clearly needed. Indeed, this was underscored by the simulation of a number of illustrative “policy reforms”, undertaken simultaneously by both OECD countries and developing countries and phased in over time as policy packages. The results suggest that some policies and policy combinations could substantially improve both economic outcomes and many environmental outcomes together – as suggested by the “policy coherence” paradigm.

Acronyms

BRIC	Brazil, Russia, India and China
BRIICS	Brazil, Russia, India, Indonesia, China and South Africa
CBD	Convention on Biological Diversity
CCS	Carbon capture and storage
CDM	Clean Development Mechanism
CO	Carbon monoxide
CO ₂	Carbon dioxide
CO ₂ eq	Carbon dioxide equivalents
CSD	Commission on Sustainable Development
DAC	OECD Development Assistance Committee
EJ	Exajoules
EO	Environmental Outlook
EU-15	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom
EU-25	Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom
EUR	Euro (currency of European Union)
FAO	Food and Agriculture Organisation of the United Nations
GBP	Pound sterling
GDP	Gross domestic product

GHG	Greenhouse gas
GJ	Gigajoules
GNI	Gross national income
Gt	Giga tonnes
GTAP	Global Trade Analyses Project
GW	Gigawatt
IEA	International Energy Agency
IMAGE	Integrated Model to Assess the Global Environment
IPCC	Intergovernmental Panel on Climate Change
LULUCF	Land use, land use change and forestry
MAD	Mutual Acceptance of Data
MDGs	Millennium Development Goals
MEA	Multilateral environmental agreement
MNP	Netherlands Environmental Assessment Agency
MSA	Mean species abundance
Mt	Million tonnes
MWh	Megawatt-hour
PFC	Perfluorocarbon
PM	Particulate matter
PM _{2.5}	Particulate matter, particles of 2.5 micrometres (µm) or less
PM ₁₀	Particulate matter, particles of 10 micrometres (µm) or less
ppb	Parts per billion
ppm	Parts per million
ppmv	Parts per million by volume
PPPs	Purchasing Power Parities
ROW	Rest of world
RTA	Regional trade agreement

UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar
VOC	Volatile organic compound
WHO	World Health Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization

References

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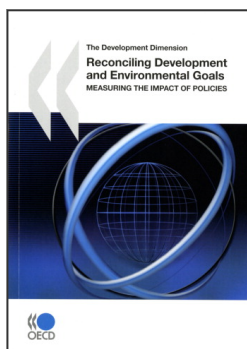
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