



International
Resource
Panel

Responsible Resource Management for a Sustainable World:



FINDINGS FROM THE INTERNATIONAL RESOURCE PANEL



acknowledgements

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Panel member Jacqueline Aloisi de Larderel provided valuable guidance and comments.

Thanks go to Ernst Ulrich von Weizsäcker and Ashok Khosla, the co-chairs of the International Resource Panel, the members of the Panel and the Steering Committee for valuable comments and inputs received during the design and preparation of the synopsis.

ISBN number of the report: 978-92-807-3278-8
Job Number: DTI/1546/PA

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Design/Layout: Alexandrine Bauville / Escourbiac, based on the original creative concept by Martina Otto.

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The full report should be referenced as follows: UNEP (2012) *Responsible Resource Management for a Sustainable World: Findings from the International Resource Panel*.



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This synopsis highlights key findings from the following reports of the International Resource Panel: *A) Priority products and materials: assessing the environmental impacts of consumption and production; B) Decoupling natural resource use and environmental impacts from economic growth; C) Metal Stocks in Society; D) Recycling Rates of Metals; and E) Assessing biofuels: towards sustainable production and use of resources.*

This synopsis and all the above-mentioned reports can be downloaded at: **www.unep.org/resourcepanel**

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preface

Natural resources rose to prominence at the turn of the millennium. The world saw a steady rise of their prices, reversing a trend that prevailed in fact since the early 19th century.

Mandated by the United Nations Environment Programme, the International Resource Panel (IRP) engages in studying the new situation and exploring options for nations and business dealing with challenges and grip with opportunities with regard to sustainable management of natural resources.

Take metals as an example. What is already there and in use? How can metals be recovered after use? Which are the present rates of recycling? Which technologies are available for improving the situation? And how is the geological reach of different metals? Users of metals want to know the answers to such questions. And countries rich in mineral resources would like to know at which stage recycling could "beat" the lucrative mining of ores. Two metals reports have been published already, on metal now in stock, and on recycling rates. Two more exist in a draft form and are undergoing a peer review process, on environmental impacts of metal use and on recycling opportunities. Some more reports are under preparation or in a stage of planning.

Metals are just one example. The spectrum of resources reaches much wider. Land and soils are hot issues in the present day world, for many people more vitally important than metals. Water is one of the most essential resources. How can it be used more efficiently so that the obvious scarcity can be overcome? What can be said about "carbon free" technologies that are portrayed as the answer to the challenge of global warming? Are there not mantraps of unforeseen damages? How is trade helpful in solving resource problems? But also: How are trade and burden shifting also disguising or distorting the environmental performance of countries? Finally, what is the specific role of cities regarding resources? They absorb the lions' share of resource but they are also the kitchens for new ideas and great solutions to resource problems. The IRP is gradually addressing more and more of such questions, using scientific expertise inside the Panel and inviting outsiders to join and help.

On a more generic and fundamental level, the IRP is addressing the question of Decoupling. How can humanity learn to be more efficient and successful in creating human well-being from a limited stock of resources? Facts have been collected and published about the steady increase of resource consumption but also about success stories of countries reducing resource intensity and in some cases even reducing absolute resource consumption. A new report will address opportunities of even more successful decoupling strategies.

This Synopsis is presented at the occasion of the Rio + 20 United Nations Conference on Sustainable Development, held in Rio de Janeiro in June, 2012. We at the IRP welcome any comments on the Synopsis and on the individual reports that are quoted therein.

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Co-Chairs of the International Resource Panel

June 2012



foreword

Rapid urban and industrial growth in recent decades have placed huge pressure on the world's natural resources, leading to threats of resource scarcity, price inflation, and degraded ecosystems. Current patterns of resource use and emissions are out of step with what the planet can sustain in the medium to long term. Problems of resource scarcity are related to changing patterns of consumption and production, with developing countries moving from agricultural to industrial ways of life, while wealthy countries continue to consume more and more natural resources. Alongside these issues there is still much poverty and inequality in the world which needs to be addressed. There is an urgent need for more knowledge and capacity on how to balance economic development and poverty reduction with sustainability issues.

Resource productivity is essential to future economic success, sustainability and prosperity. Significant potential exists for improved resource productivity through technological innovation and demand changes over the whole resource life cycle -from raw materials to eventual disposal. Efficiency gains in the construction, transport, agriculture and heavy industry sectors could lift resource productivity markedly. This will require enormous political commitment and financial investment. If the situation is not addressed, however, actual costs to nations will be much higher.

The United Nations Environment Programme (UNEP) is tackling these challenges in a twofold manner. Firstly, the UN has adopted the notion of a 'Green Economy', aiming to shift investment away from resource and carbon intensive economic activities in a balanced and inclusive way, focusing on human and social development. Secondly, the UNEP-hosted International Resource Panel (IRP) has been established to provide authoritative scientific assessments on how sustainable resource use can be achieved and environmental impacts reduced over the life cycle of resources. The IRP is contributing to a better knowledge base on how to decouple human development and economic growth from environmental degradation.

The assessments of the IRP to date make a convincing case for sustainable natural resource management, and decoupling economic growth from resource use and environmental impacts. There are many opportunities for governments and businesses to work together to create and implement policies to encourage sustainable resource management. Better planning, more investment, technological innovation and strategic incentives are all vital. Demand management and waste reduction policies need to supplement supply side activities. The IRP continues to provide knowledge and information to policy makers. In the next five years it plans to both deepen its assessments of consumption and production, decoupling and biomass, and to deliver additional assessments on water, soil and land use, and the environmental impacts of trade. Only with the full, complete and impartial picture can governments make the defining choices that might lead the world to a sustainable century.

Achim Steiner, UN Under-Secretary General
and Executive Director UNEP

Nairobi, Kenya, June 2012

Introduction



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