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International Resource Panel

Resource Efficiency: Potential and Economic Implications

Summary for Policy-Makers

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Summary for Policy-Makers




Resource Efficiency: Potential and Economic Implications

Produced by the **International Resource Panel**.

This document highlights key findings from the report and should be read in conjunction with the full report.

The report can be downloaded from www.unep.org/resourcepanel.
Additional copies can be ordered via email: resourcepanel@unep.org

Preface

Since its inception in 2007, the International Resource Panel has been committed to providing independent, authoritative and policy relevant scientific assessments on the future state, management and use of natural resources. With the publication of 15 assessment reports and continuous dialogues with policy-makers, industry leaders and civil society, the Panel has stood out as a credible voice in the international community that underlines imperatives and the urgency for the sustainable management of natural resources and that articulates the technological and economic potential of resource efficiency and ways forward for the related public policies.

Two historic events in 2015 figure prominently on resources issues: the 2030 Agenda on Sustainable Development highlights that sustainable resource management is critical to poverty eradication and to the sustainable future we want; and the Paris Agreement on Climate Change confirms that decarbonisation must go hand in hand with decoupling economic growth from the escalating use of natural resources and environmental degradation as one of the key components for achieving the transformation towards a better tomorrow for current and future generations.

It is exactly for these reasons that the G7 at their Summit in Germany in June 2015, as part of their increased commitment to improving their efforts in resource efficiency, asked the International Resource Panel to produce a report on the most promising potentials and solutions for resource efficiency for all countries - developed, newly industrialized and developing. This rapid assessment report is the result of a truly collective effort by scientists and experts of the International Resource Panel who thoroughly reviewed the best science available. The findings of the report point out the importance of joining forces for acting now as well as the huge potential that resource efficiency can have, if it is implemented carefully and supported across different sectors and at multiple levels. The pressing need to invest in resource efficiency could actually lead to a positive economic outcome. The report shows how resource efficiency can lead to higher economic growth and employment, if supported by well-designed policies.

The assessment demonstrates that because many areas of resource use are relatively inefficient, the potential for resource efficiency is tremendous. This is supported by the results of the modelling undertaken for this study, which shows that resource efficiency combined with climate policy could at the same time

stabilise global resource use by 2050 and boost incomes and economic growth.

Looking forward, the report demonstrates numerous examples from different countries around the world of increasing resource efficiency in different sectors. It thereby puts the different challenges ahead into perspective and illustrates how to learn from each other and how to scale up what is working.

We are very grateful to Paul Ekins and Nicholas Hughes for their tremendous effort in presenting a comprehensive up-to-date perspective for understanding the potentials and economic implications of resource efficiency. Their remarkable work gives us hope that with engaged actors, it will be possible for us to improve wellbeing for everyone and protect the planet today and tomorrow.

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Foreword

Over the past decade, the importance of resource efficiency and sustainable management of natural resources has increased considerably, culminating last year in the historic adoption of the 17 Sustainable Development Goals and in the decision by the leaders of the Group of Seven (G7) nations to promote ambitious actions to improve resource efficiency as a core element of sustainable development.

As part of that commitment, the G7 asked the International Resource Panel to prepare a synthesis report that highlights the potential and most promising solutions for resource efficiency. This rapid assessment report - *Resource Efficiency: Potential and Economic Implications* - provides an analysis of the status and trends of resource efficiency and presents best-practices and possible solutions for developed countries, emerging economies and developing countries.

While it is essential and significant for the G7 to champion resource-efficiency, that alone will not be sufficient. Achieving an increase in resource efficiency will require a concerted action by all countries to change the way that resources are produced and consumed across the economic and development spectrum. Genuine and effective international cooperation will make transformation to a resource efficient future a reality.

Such a transformation presents all countries with not only a major challenge, but also an historic opportunity to build dynamic, sustainable, innovative and people-centred economies while preserving the natural resource base and environment for future generations. In short, the global improvement of resource efficiency represents a major instrument to achieve the goals we have set in the 2030 Agenda.

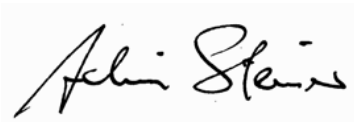
Achieving this will only be possible with focused political will, action and determination at all levels, along with the acknowledgement that there are differences in resource challenges determined by local contexts that make a 'one size fits all' solution impossible.

The examples in this report illustrate what is working and why. The report shows that a landfill tax in the United Kingdom contributed significantly to increased recycling rates, reaching nearly 45 per cent for household waste in 2014, up from 26 per cent for overall waste in 2012. It also shows that Japan's 'Top Runner' scheme, which uses as a benchmark the highest performing energy-efficient appliances for setting the required average standard in a future year, led to efficiency

improvements in different product groups of 16-80 per cent in the last 12 years. It further demonstrates that planting trees alongside crops can improve soil fertility, such as in Zambia, where 160,000 farmers have planted nitrogen-fixing acacia trees among their crops, leading to average maize yields of 4.1 t/ha from fields planted with acacias, compared to 1.3 t/ha outside of the tree canopy.

These examples show what is possible if we work ambitiously and jointly and should fill us with hope and motivation for the way forward. It is my strong desire that the findings of this important report will inspire determined action in increasing resource efficiency.

I would like to express my gratitude to the International Resource Panel, under the leadership of Janez Potočnik and Alicia Bárcena, for developing this important report.



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