

EXPLORING REDUCTION IN THE 3RS: IMPROVING RESOURCE EFFICIENCY IN ASIA AND THE PACIFIC

Objectives

Considering the steep increase in demand and consumption of resources, a shortage of natural resources will soon become one of most important items on the political agenda, in addition to climate change and biodiversity. Therefore, improving resource efficiency is becoming an important policy strategy for Asia, a region which now consumes the largest proportion of resources in the world due to the economic growth that has accompanied industrialisation. Resources are crucial for development at the global level to develop infrastructure as well as produce commodities. However, if we continue to increase the extraction of primary natural resources, we will end up overstepping planetary boundaries. We have to consider how we can limit the use of primary natural resources and how we can use resources more efficiently to meet societal objectives to achieve green growth.

With this background, the session featured discussions of how to shift to sustainable resource use in Asia, considering the potential of 3Rs recyclable resources use as well as dematerialisation at all lifecycle stages of key products and materials. It also addressed how to find opportunities of resource efficiency improvement mainly through recycling by businesses and consumers in the context of industrialising Asia. In addition, we explored far beyond recycling, such as looking at a reduction of natural resource demand and improved governance for sustainable resource management.

List of Speakers

[Moderator]

Yasuhiko Hotta, Leader, Sustainable Consumption and Production Area, IGES

[Keynote Speaker]

Raimund Bleischwitz, Co-Director, Material Flows and Resource Management, Wuppertal Institute

[Speakers]

Shaoyi Li, Head, Integrated Resource Management Unit /
Chief, Secretariat of International Resource Panel, United Nations Environment Programme (UNEP)

Chika Aoki-Suzuki, Policy Researcher, Sustainable Consumption and Production Area, IGES

[Discussant]

Kazunobu Onogawa, Senior Fellow, IGES



Key Messages

- **Promoting Resource Efficiency and Resource Reduction through systematic approaches is crucial to achieve decoupling and green growth.**
- **The 3R concept, which was born in Japan, has been recognised as an important tool for achieving resource efficiency.**
- **Linking all sectors and involvement of all actors in the resource chain would be a driving force to improve resource efficiency, leading to reduction.**
- **Issues were raised on the need to consider beyond efficiency and putting a cap on resource consumption to avoid crossing planetary boundaries.**
- **The potential and effectiveness of international collaboration to improve the governance of sustainable resource management was emphasised.**
- **However, the argument was brought up on the need to consider quality of life improvement through resource consumption in developing countries.**

Summary of the Session

Prof. Dr. Raimund Bleischwitz, in his keynote presentation, argued for the importance of international resource policy improvement and recent trends in Europe related to resource-efficient policy development. He then discussed several approaches for policy development including development of policy recommendations for international governance on resource management, and improved transparency of the resource value chain.

Mr. Shaoyi Li provided major messages from the work of IRP. He began his presentation by showing the significance of the AP region in global resource transactions. He then introduced recent findings from IRP, stating that relative decoupling is occurring; the involvement of all actors is necessary for an efficient recycling system; industry can be a driving force for maximisation of resource efficiency. Lastly, he argued that a systematic approach is crucial to address complicated resource linkages.

Ms. Chika Aoki-Suzuki presented various drivers behind the improvement of resource efficiency policy in emerging Asia, with a case study from Indonesia. She discussed that a stable increase in the labour population, outstanding industrialisation, and low penetration of infrastructure and consumer goods are the key drivers to be taken into consideration. Based on the discussion, she argued that prioritised establishment of resource efficient social system would be crucial for the leapfrog type of development in Indonesia.

Mr. Kazunobu Onogawa discussed the need to consider issues beyond efficiency and putting a cap on resource consumption to avoid crossing planetary boundaries. In addition, he questioned the feasibility of achieving decoupling, expressing his consideration that an improved quality of life could be achieved, to a certain extent, through resource consumption in developing countries.

In the panel discussion, presenters discussed the issue of "Beyond 3R, beyond recycling". Presenters expressed the need for product innovation, systematic type invocation and lifestyle change. They also mentioned that all sectorial decoupling efforts have to be linked on a global scale in order to achieve resource efficiency.

In the Q&A session, Prof. Ryokichi Hirono of Seikei University asked about the substitution effect which could play an important role in resource efficiency improvement and overcoming resource constraints. Prof. Hirono also emphasised the need for resource governance to manage global commons. On resource substitution, Dr. Bleischwitz answered that substitution potential would be fairly limited because of the potential of product design, with a shift from non-renewable to renewable still being limited. Instead, he emphasised that functional thinking (prioritising function rather than consumption) is important. Mr. Li answered that the substitution effect is important and should be considered. However he argued that there needs to be advantages in cost and environmental impact when substitution is applied, showing example of renewable energy which has advantages in terms of energy consumption but also has concerns with regards to increasing material resource consumption. On resource governance, Dr. Hotta agreed on the need for international cooperation on sustainable resource management. The chain of resource use is now globalised. Thus for effective policy intervention on unsustainable resource consumption, it is crucial to have an international collaborative approach between resource extracting and final consuming countries. IGES research work has shown that such international collaboration is not only effective in terms of resource management but has environmental and economic benefits compared to the unilateral approach.

Another audience member asked for comments from the presenters on how to strike a balance between quality of life and resource constraints in developing countries where increasing consumption, drastic urbanisation and a steep increase in population are expected. Mr. Onogawa provided his observation that seeking prosperity within the limits of resources is the right direction for all people. He also said that we have to find the way forward, respecting the strong desire among developing countries for material prosperity.