**OECD-UNEP CONFERENCE ON RESOURCE EFFICIENCY**

**Opening remarks by Mr. Pier Carlo PADOAN, OECD Deputy Secretary-General**

**23 April 2008, Paris, France**

Good afternoon Ladies and Gentlemen,

On behalf of the OECD, I am very pleased to welcome you to this OECD-UNEP conference on resource efficiency. I would like to extend a special welcome to the two conference co-chairs: Mark Mwandosya, Minister for Water and Irrigation of Tanzania, and Masayoshi Namiki, Parliamentary Secretary for Environment of Japan.

In my remarks, I will first highlight the challenges associated with resource efficiency. I will then describe the various responses to these challenges, and finally say a few words about this conference and its objectives.

***The challenge***

This conference is particularly timely – more than ever we are facing today record high cereal, fuel and other commodity prices. This reflects partly the terms of demand and supply, but also a growing global demand for materials (especially in the emerging economies), and increasing concerns about supply security and sustainability of resource use.

If these price increases persist, there will be significant macroeconomic consequences (e.g. inflation) and further environmental challenges associated with the changing material flows both within and among countries. Prices also influence decisions about technological development and innovation. Consequently, finding a more sustainable and efficient way to extract and use natural resources, have become critical considerations, thus adding to the long-standing concerns about environmental impacts. These realities create major economic, environmental and social challenges for our societies and the international community. How can we sustain long-term economic growth and wellbeing and, at the same time, ensure the sustainable management of our natural resources and reduction in environmental pressures?

So we hear that resource extraction and use are a challenge. But exactly how big is this challenge? Global resource extraction has increased by half since 1980; it is now about 60 billion tonnes and expected to reach 80 billion tonnes in 2020.[1] The OECD countries extract about 40% of the world total.

Looking at resource use, OECD countries consume nearly 50% of global natural resources, while accounting for only 18% of the world's population.[2] But there are significant differences between countries and regions – for example, OECD-Europe imports over 70% and OECD-Asia 99% of the metal resources they consume. Consumption in the emerging economies – the BRICS – is also increasing rapidly. For instance, China alone accounts for half of global cement consumption and about a third of global steel, coal, copper, tin, zinc, meat and cotton consumption.

While per capita material consumption in the BRICS and other non-OECD countries is still well below the level of the OECD countries, the production and consumption patterns are evolving. Looking at the future, if everyone on earth were to adopt a "western" lifestyle and consumption pattern, we would reach the physical limits of the planet, for a number of resources. Some even say that we would need a resource base that is 2.5 times the earth's actual resource base.

Improving resource efficiency is also good for the environment. It helps to reduce the negative environmental impacts associated with the extraction, use and end-of-life management of natural resources. It also helps to avoid situations where valuable materials contained in waste are disposed of and ultimately lost for the economy. Furthermore, it helps to ensure that the consumption of resources and their associated impacts do not exceed environment's carrying capacity. Improving resource efficiency can make the relationship between economic growth and resource use less linear. It can also lead to greater energy and water efficiency.

The topic of this conference is not only important, but it is also of direct interest to me. As the OECD Deputy Secretary-General responsible for the Organisation's work on innovation, science and technology – among other issues – I am familiar with the various approaches to resource efficiency. I am also personally leading the work on the OECD Innovation Strategy, which not only looks at the global dimensions and incentives for innovation, but also examines the changing

1 *Outlook* data on global resource extraction and materials use up to 2020 are based on the BASE scenario of the GINFORS model (Giljum *et al.*, 2007).

2 OECD (2008). Measuring material flows and resource productivity: synthesis report.

nature and role of innovation in addressing energy, climate change and other complex global challenges.

***The responses***

So where do we find the responses? We have them at the global, regional and national levels. And we find them with both public and private sectors. The G8 countries paid special attention to resource efficiency at their past four summits – and I understand that they will do so again this year in Japan. The OECD Council adopted recommendations on resource productivity in 2004 and 2008. The 2008 Council recommendation will be made public next week after the OECD Environment Ministers' Meeting. The OECD has also just published a policy-maker's guide on measuring material flows and resource productivity. And in 2007, UNEP set up an International Panel on Sustainable Resource Management. The EU adopted thematic strategies on the sustainable use of natural resources as well as on waste prevention and recycling in 2005.

Most OECD countries address efficient management and sustainable use of natural resources. They have also launched initiatives to promote waste prevention, sustainable materials management, integrated product policies and the "3 R" Initiative (reduce, reuse & recycle). China has recently adopted a law on the "circular economy".

The business sector has for its part established stewardship programmes for materials and products, invested in R&D and uses advanced technologies and non-technological innovation to increase materials and energy efficiency in both production and consumption phases. It also promotes eco-design and coherent materials supply and use systems. Sustainable resource use is further supported by international efforts to manage natural resource rents in a more transparent way and to promote good governance in extractive industries (e.g. the OECD Guidelines for Multilateral Enterprises). We will learn more about all these different approaches in the coming days.

***This conference***

Before closing, I would like to recall briefly our objectives for these three days. We are here to explore how improved resource efficiency can reduce negative environmental impacts of resource

exploitation, transportation, use and disposal, while securing adequate supplies to sustain economic growth. More specifically, we are here to review:

- Knowledge and information about material flows and resource productivity and their economic and environmental implications.

- Policies, measures and instruments that help reduce environmental impacts from the production and consumption of resources, and avoid waste of resources.

- The framework conditions for markets and public policies to contribute improving resource efficiency and ensuring sustainable resource use.

I am grateful to the two conference co-chairs – Minister Mwandosya and Parliamentary Secretary Namiki – as well as to all the other chairs, speakers and rapporteurs for their contributions. I know that the conclusions of the co-chairs are expected in the OECD Environment Ministers' Meeting next week (28-29 April, Paris) and in the G8 Environment Ministers' Meeting next month (24-26 May, Kobe).

[I regret that my own schedule does not allow me to participate in your discussions beyond this first session.] I wish you a successful conference and look forward to learning about the outcome of your discussions.

Thank you for your attention.