Global Policy Options for Promoting Resource Efficiency

by

Bas de Leeuw
Managing Director, World Resources Forum (WRF)

21 MARCH 2013
Global Policy Options for Promoting Resource Efficiency

Bas de Leeuw
Managing Director
World Resources Forum
www.worldresourcesforum.org
bas.deleeuw@worldresourcesforum.org
World population 1400-2050

Global resource use 1980-2020

Resources are getting scarce

- Physical limits
- Political risks
- Price volatilities
- Environment and health
- Social limits (poverty, labor conditions)

Breaking News?

“The earth is now more cultivated and developed than ever before ... (...) ... cities are springing up on unprecedented scale. We’ve become a burden to our planet. Resources are becoming scarce, and soon nature will no longer be able to satisfy our needs.”
“The earth is now more cultivated and developed than ever before ... (...) ... cities are springing up on unprecedented scale. We’ve become a burden to our planet. Resources are becoming scarce, and soon nature will no longer be able to satisfy our needs.”
“I threw it away”
Resource Efficiency - decoupling (UNEP, 2011)

Figure 1. Two aspects of ‘decoupling’
Doing more with less

Consuming and producing more efficiently and differently ...

... and providing opportunities for the poor
Sustainable and inclusive growth and development

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Two key concepts:

• the concept of needs, in particular essential needs of world's poor, to which overriding priority should be given; and

• the idea of limitations imposed by state of technology and social organisation on the environment's ability to meet present and future needs."

Global policy response needed

I’m glad the hole isn’t in our end...
Analysis 3 WRF meetings
Top 3 proposed policy responses

1. Invest in resource efficiency

2. Invest in alternative resources, renewable energy, recycled materials (urban mining)

3. Secure supplies (international cooperation)
WRF Declaration 2009 (Davos)

- world-wide per-capita targets for natural resource extraction and consumption

- absolute decoupling between economic development and resource use

- focus research and development on increasing resource productivity
Chairman’s statement WRF 2011 (Davos)

• double resource productivity by 2020 and reach fivefold increase by 2050
• Tax resources and pollution
• Support innovation
• Develop partnerships
• Implement performance measurement
• Safeguard transparency
• Explore driving forces consumption
It’s all because of consumption

I’d like to end poverty, stop violence and racism, and get rid of pollution. Everyone should be equal.

I want to dress in the nicest clothes, drive a great car, talk on the latest mobile phone, and watch my brand new DVD.
World behind the Product

“... consumers are increasingly interested in the "world that lies behind" the product they buy ... they want to know how and where and by whom the product has been produced. This increasing awareness about environmental and social issues is a sign of hope. Governments and industry must build on that“ (Klaus Toepfer)
World behind the wedding ring (7g) is 2700 kg (factor 385,000)

F. Schmidt-Bleek, Factor 10 Institute, France

Metal ring: Factor 7070
Car: Factor 15
LCD: Factor 300
Cell phone: Factor 500
PC: Factor 1000

Source: Seppo Lajonnen
Chairman’s statement WRF 2012 (Beijing)

Scarcity of resources, increasing prices, and unsustainable use of resources hinder economic development, lead to poverty and social unrest and pose risks for global stability.
Securing resource supplies

• Governments need to be alert to growing spider web of **bilateral resource agreements**, in particular those involving developing and emerging countries

• Better resource governance (neutral international platform)
Investing in resource efficiency

- Investments in more resource efficient products, services and systems
- Phasing out dependencies from fossil fuels
- Sustainable business and city management: energy efficient building, renewable materials such as wood, metal recycling, urban mining, ICT tools
Policies for Resource Efficiency

• **Governments**: regulations, taxes, awareness and information, infrastructure

• **Business**: better products and services, better information (resource efficient, less polluting, better labour conditions)

• **Individuals**: consume differently, do good, and **stop** once in a while and be happy?
Urban mining

A ton of ore from a gold mine yields 5 grams of gold
A ton of cell phones can yield up to 150 grams of gold
Urban Mining

• development infrastructure for primary and urban mining in Africa
• facilitation of access to global markets for the commodities resulting from primary and urban mining
• inclusion of informal sector
• Non-renewable raw materials (copper, gold etc) originate in many cases in developing countries

• Availability of many metals (eg. rare earth elements) more critical

• Efficient management more important than ever, recycling of discarded consumer goods

**Sustainable Recycling Industries Program (SRI):**
Advance **raw materials stewardship** in developing countries, achieve sustainable recovery of raw materials (secondary materials) and help make them available for the international market
Recovery of secondary raw materials mainly done in the informal sector

~ 25’000 people work in the informal plastic recycling sector in New Delhi, India

~ 10’000 workers engage in the informal e-waste recycling sector in Accra, Ghana
The prevalent practices in the informal sector bear high risks

<table>
<thead>
<tr>
<th>Pollution</th>
<th>Health hazards</th>
<th>Cross contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open cable burning is a major source for dioxines</td>
<td>Informal gold leachers inhale toxic fumes</td>
<td>The lead content in recycled plastics often lies above legal levels</td>
</tr>
</tbody>
</table>
Standards needed

renewable  non-renewable  secondary
Sustainable Recycling Industries

1. **Improvement of basic data for assessing the quality of secondary raw materials** (lack of life-cycle data). Regional centers for collection of data to be developed in India, South Africa, Egypt and Brazil.


3. Introduction of **sustainability criteria** for non-renewable secondary raw materials through establishment of multi-stakeholder platform.
Shaping the Future of Natural Resources

Keynotes, Workshops, Discussions

Resource Efficiency and Governance
- Research and Policies, Resource Governance, Scarcity of Metals and Minerals, Decoupling, Dematerialisation, LCA

Sustainable Business and Industry
- Green Industry, Sustainable Innovation, Mining, Recycling, E-waste, Urban Mining, Commodity Trading, Retail Trading

Sustainable Cities and Infrastructure
- Urban Eco-Efficiency Lab, Energy, Water and Infrastructure, Food and Biodiversity, Nature and Ecosystems

Lifestyles and Education
- Sustainable Consumption and Production, Product Information, Value and Drivers, Social Science, Sufficiency, Communication and Education

Contact:
World Resources Forum Secretariat
Lurchfeldstr. 5
CH-9016 St. Gallen
Phone: +41-58-705 74 00
Email: info@worldresourcesforum.org
www.worldresourcesforum.org
Visit the World Resources Forum

www.worldresourcesforum.org

info@worldresourcesforum.org