

UNCTAD

Multi-Year Expert Meeting on Commodities and Development 2013

Recent developments and new challenges in commodity markets, and policy options for commodity-based inclusive growth and sustainable development

Room XXVI
Palais des Nations
Geneva, Switzerland

Global Policy Options for Promoting Resource Efficiency by

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

21 MARCH 2013

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World Resources Forum

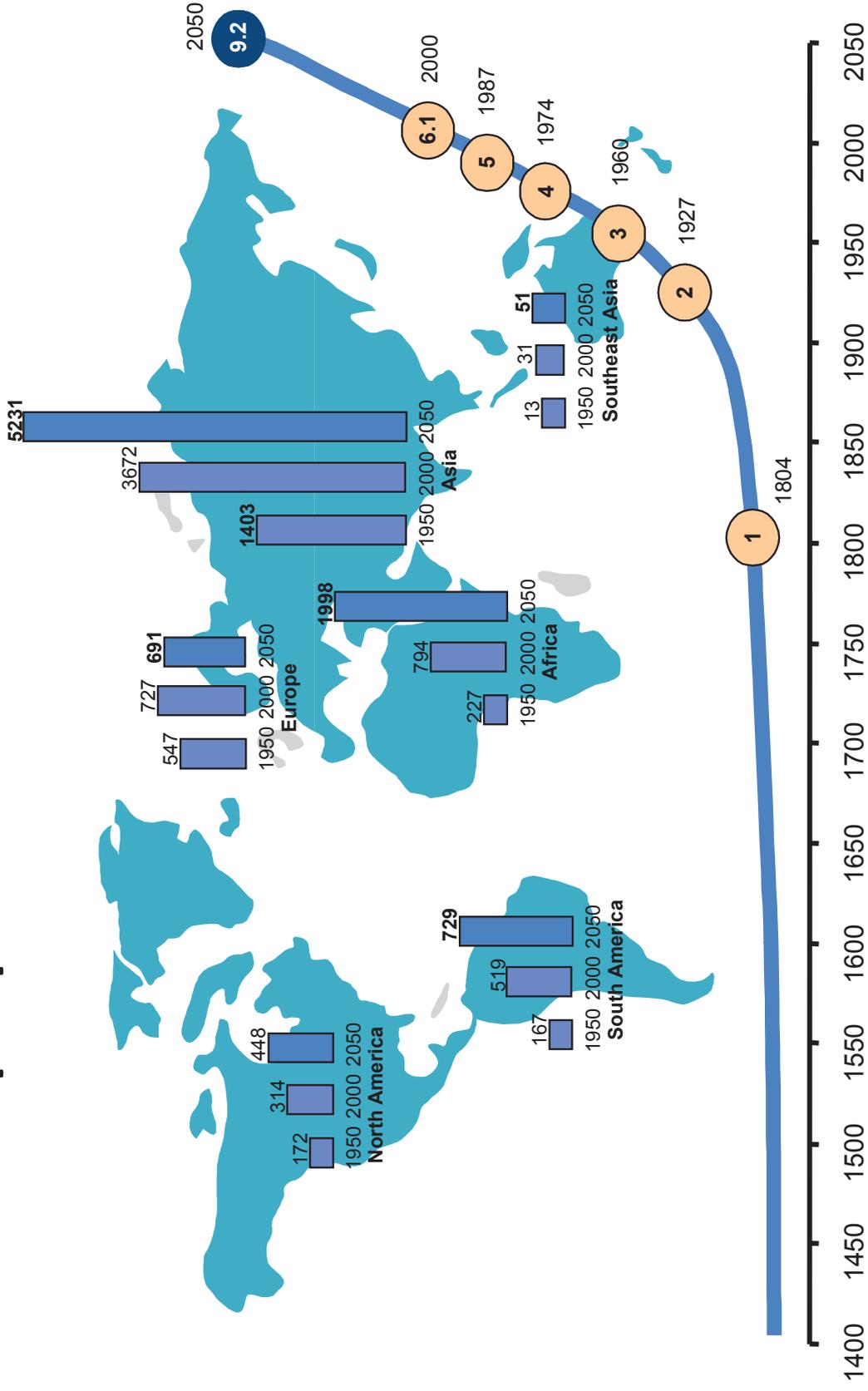
*UNCTAD Multi-Year Expert Meeting on
Commodities and Development
Geneva, 20-21 March 2013*

Global Policy Options for Promoting Resource Efficiency

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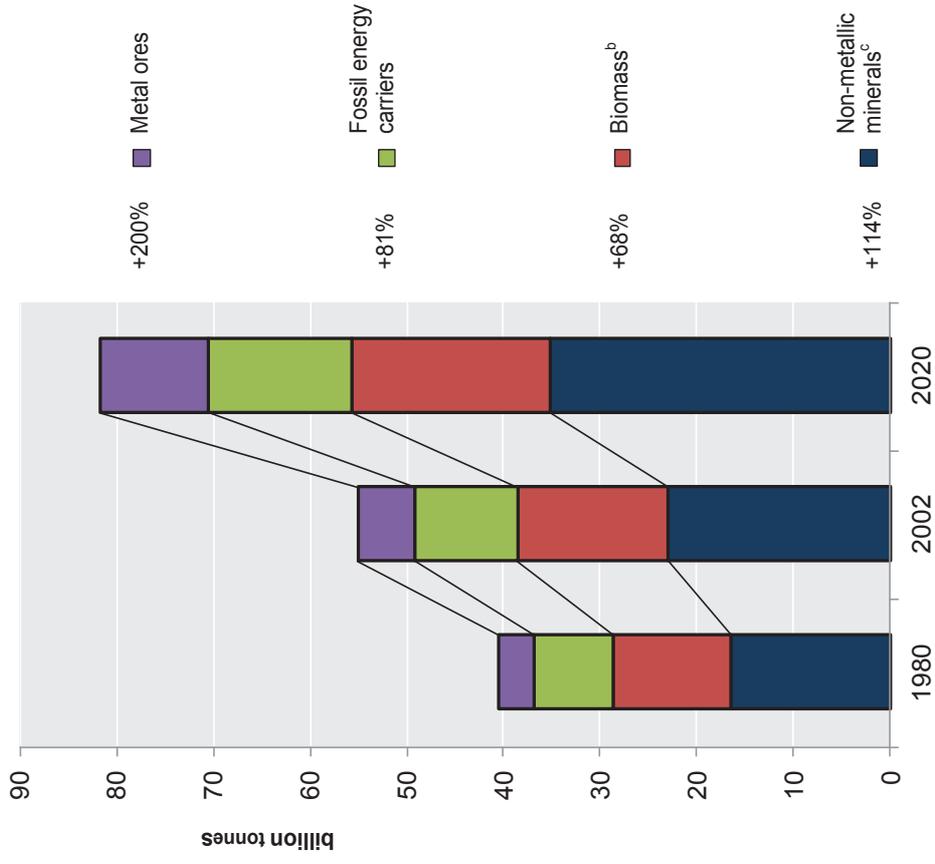


World population 1400-2050



Source: Population Reference Bureau, World Population Prospects: The 2008 Revision. Highlights. New York: United Nations.

Global resource use 1980-2020



Source: Measuring Materials Flows and Resource Productivity, OECD 2008

Resources are getting scarce



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

See Resource Snapshots at <http://www.worldresourcesforum.org/resource-snapshots>



World Resources
Forum



Breaking News?



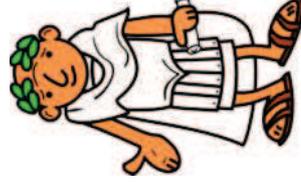
“The earth is now more cultivated and developed than ever before ... (...) ... cities are springing up on unprecedented scale. We’ve become a burden to our planet. **Resources are becoming scarce, and soon nature will no longer be able to satisfy our needs.**”

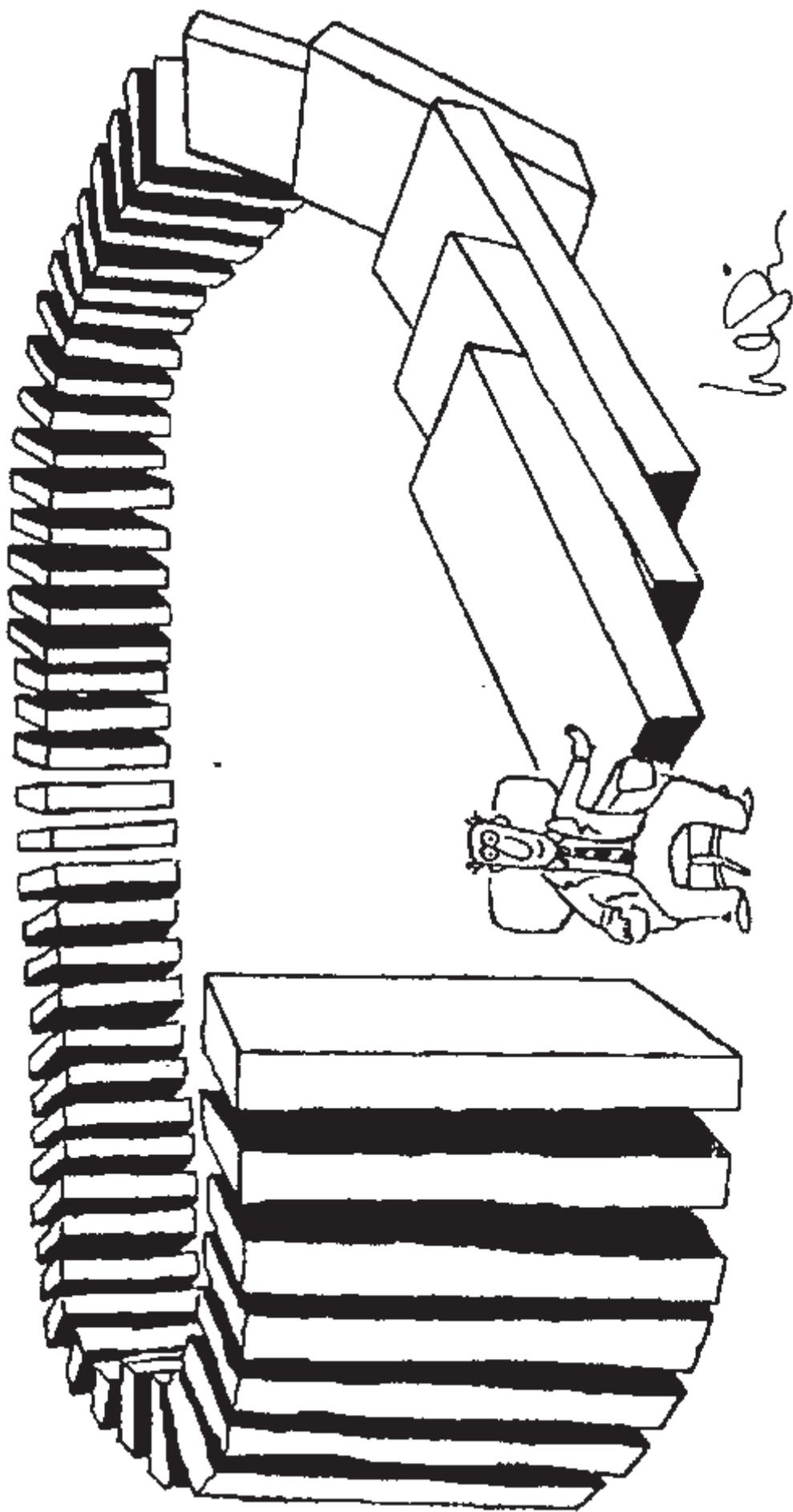


**Source: Quintus Septimus Florens Tertullianus
Roman theologian, 200 AD**



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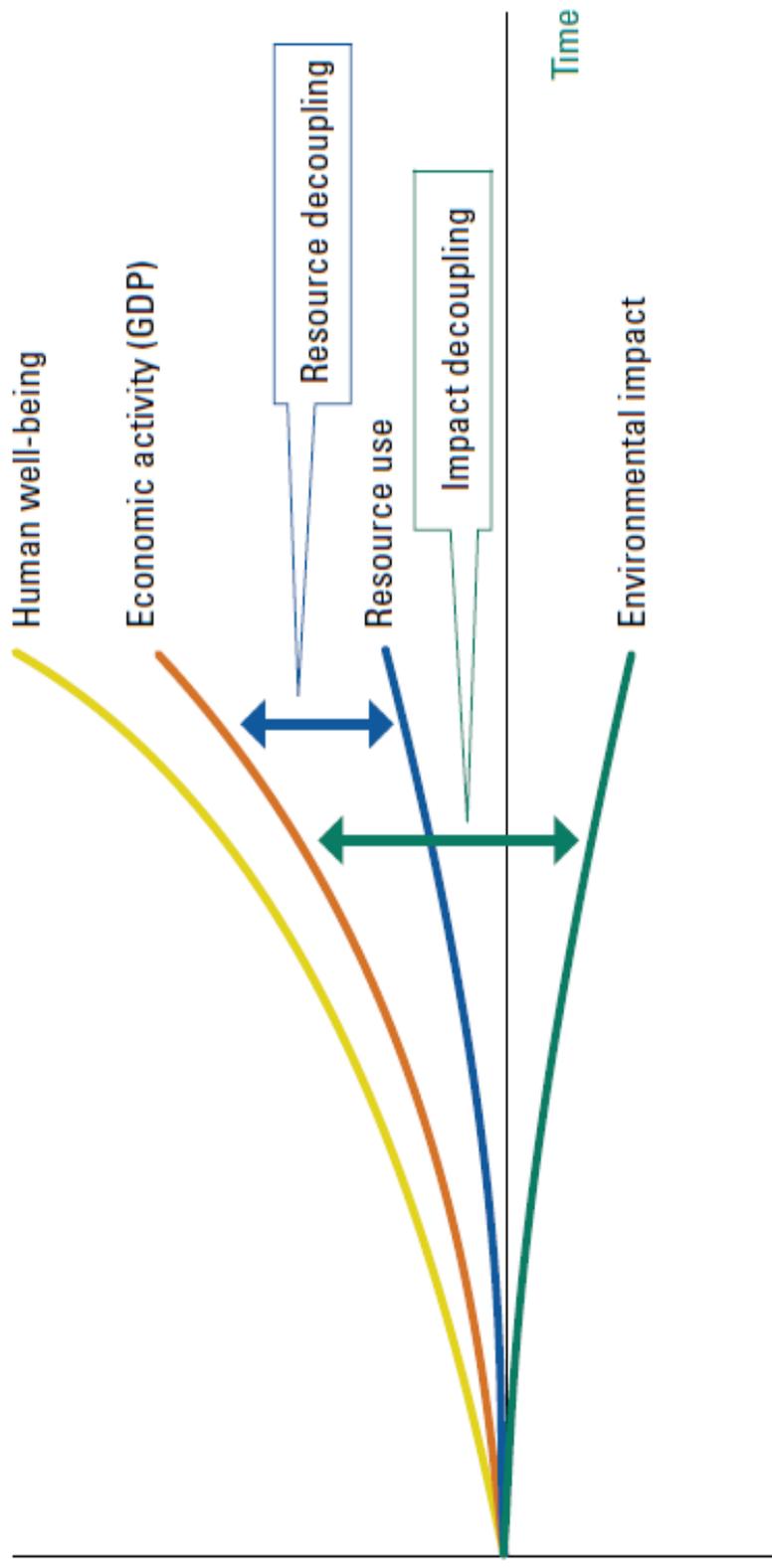




“I threw it away”

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

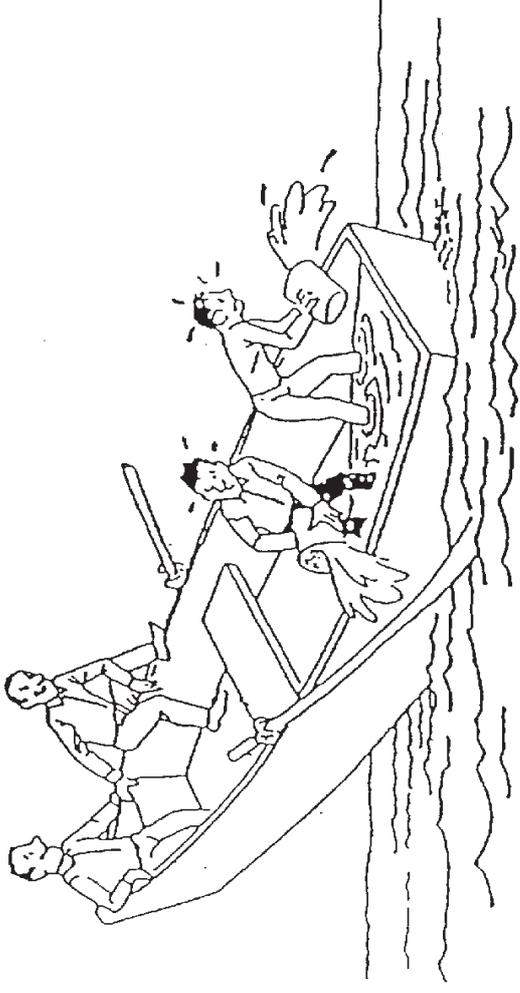
"Sustainable development is development that meets the needs of the present without compromising the ability of **future generations** to meet their own needs

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



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

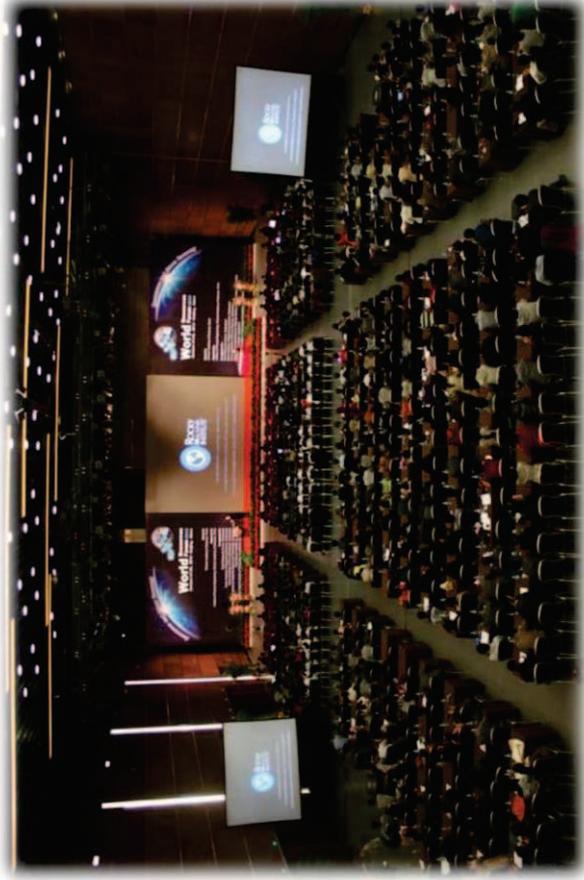


Metal ring	Factor 7070
Car:	Factor 15
LCD:	Factor 300
Cell phone:	Factor 500
PC:	Factor 1000

Source: Seppo Lajonnen

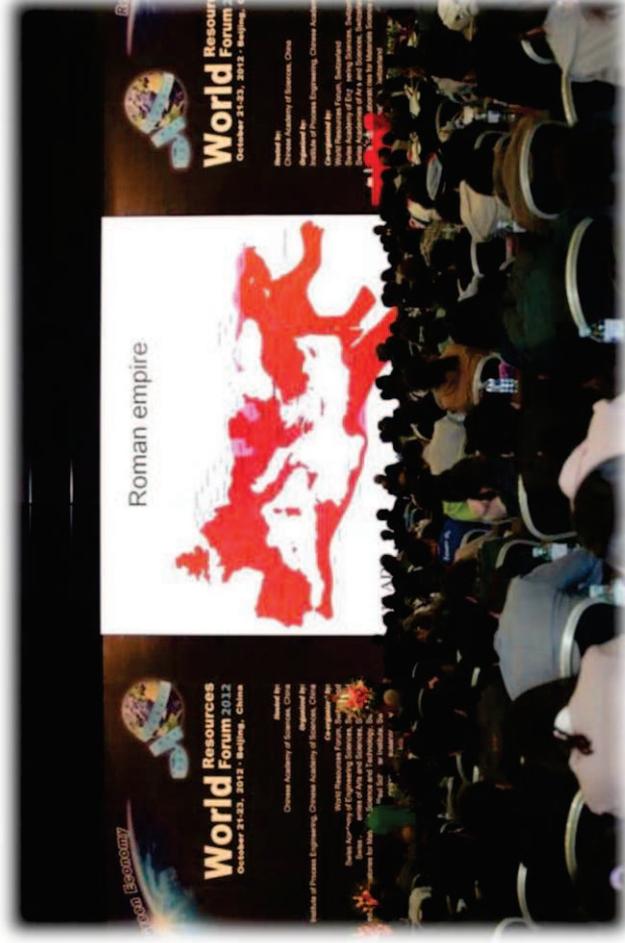
Chairman's statement WRF 2012 (Beijing)

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



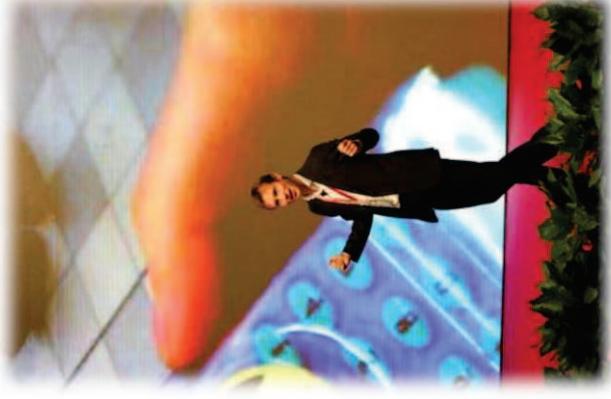
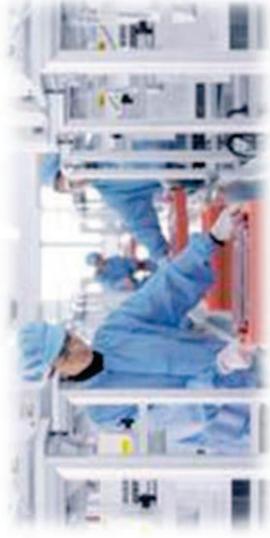
Securing resource supplies

- 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 fossil fuels
- Sustainable business and city management: energy efficient building, renewable materials such as wood, metal recycling, **urban mining**, ICT tools

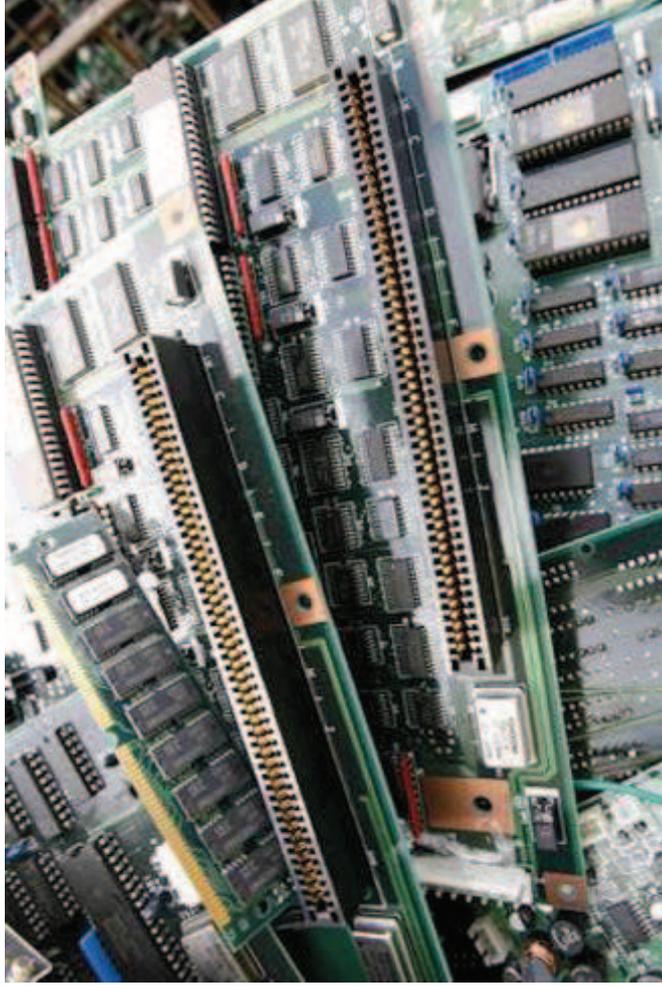


Policies for Resource Efficiency

- **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



Urban Mining, Challenges and Opportunities for Africa

Synergies between E-waste Recycling and Mining of Mineral Resources

UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA

Eighth African Development Forum (ADF-VIII)

Addis Ababa, Ethiopia, 23-25 October 2012



Organized by World Resources Forum,
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World Resources Forum

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Mineral Science & Technology





Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



Materials Science & Technology

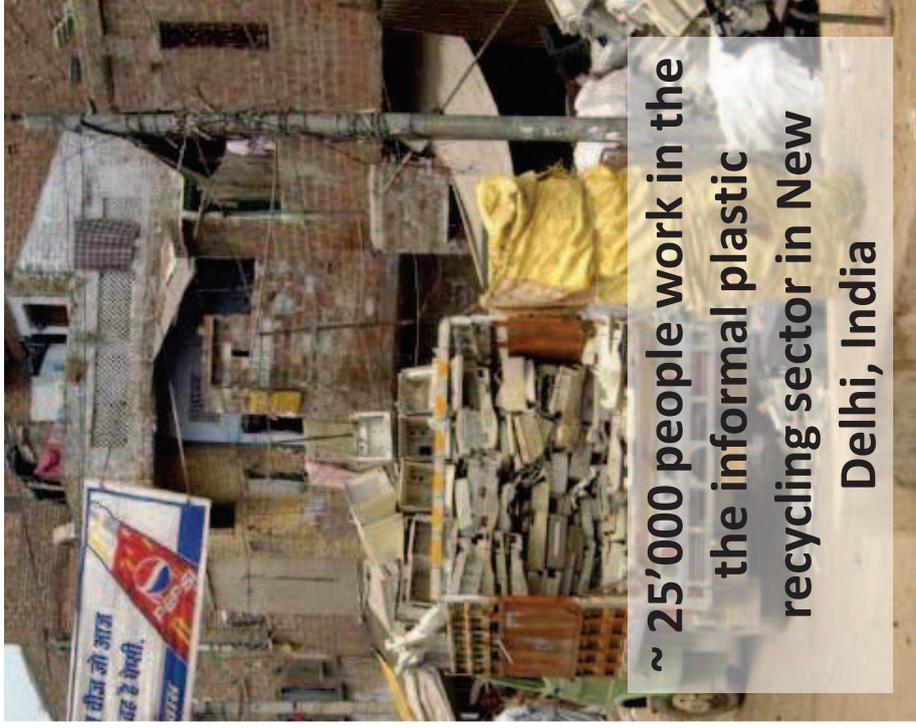
Federal Department of Economic Affairs FDEA
State Secretariat for Economic Affairs SECO

- 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
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

Pollution	Health hazards	Cross contamination
		
<p>Open cable burning is a major source for dioxines</p>	<p>Informal gold leachers inhale toxic fumes</p>	<p>The lead content in recycled plastics often lies above legal levels</p>

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
2. Pilot projects for **improving recycling chains**. Exchange best practices and standards, market-oriented disposal, reintroduction into global raw material markets. Ghana, South Africa, Egypt, Columbia, Peru and India
3. Introduction of **sustainability criteria** for non-renewable secondary raw materials through establishment of multi-stakeholder platform





World Resources Forum 2013

October 6 – 9, 2013 • Davos Switzerland

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, Values and Drivers, Social Science, Sufficiency, Communication and Education

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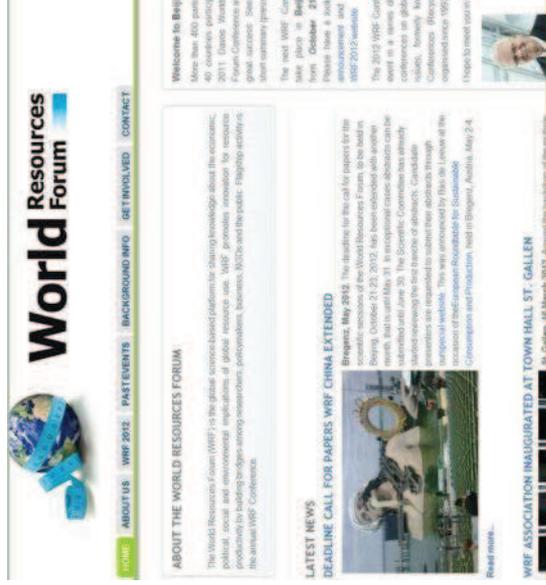


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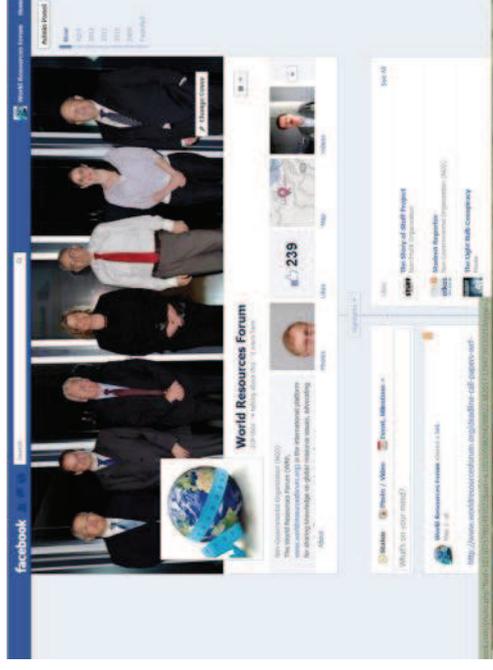


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Visit the World Resources Forum



The screenshot shows the World Resources Forum website. At the top is a navigation menu with links for HOME, ABOUT US, WRF 2012, PAST EVENTS, BACKGROUND INFO, GET INVOLVED, and CONTACT. The main content area features a large header with the World Resources Forum logo and a globe. Below this, there are several news items. One prominent article is titled 'ABOUT THE WORLD RESOURCES FORUM' and discusses the forum's role in providing a platform for sharing knowledge about the economic, political, social, and environmental implications of global resource use. Another article, 'LATEST NEWS', reports on a 'DEADLINE CALL FOR PAPERS WRF CHINA EXTENDED' and mentions that the deadline for abstracts has been extended to June 30. A third article, 'WRF ASSOCIATION INAUGURATED AT TOWN HALL ST. GALLEN', mentions the inauguration of the World Resources Forum Association on March 29, 2012.



The screenshot shows the Facebook page for the World Resources Forum. The page header includes the Facebook logo and the name 'World Resources Forum'. The cover photo features a group of men in suits. The page has 239 likes and 100 members. The main content area displays a post from the 'World Resources Forum' page, dated May 29, 2012, with the text: 'The World Resources Forum (WRF) is the global economic-based platform for sharing knowledge about the economic, political, social and environmental implications of global resource use. WRF provides innovation for resource productivity for leading bridges among researchers, policymakers, business, NGOs and the public. Flagship activity is the annual WRF Conference.' Below the post, there are several comments and shares.



The screenshot shows the Twitter profile page for the World Resources Forum (@WorldResourcesForum). The profile information includes the name 'WorldResourcesForum', the handle '@WorldResourcesForum', and the bio 'World Resources Forum inspires economic and environmental innovation for a sustainable future. 4500 members. International audience. St. Gallen, Switzerland. http://worldresourcesforum.org'. The page shows 110 tweets, 10 followers, and 44 likes. A list of tweets is visible, including one from Green-Joe (@GreenJoe) dated May 29, 2012, and another from WRF (@WorldResourcesForum) dated May 29, 2012, regarding a deadline call for papers.



www.worldresourcesforum.org

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