



Thematic Strategy on the Sustainable Use of Natural Resources



SDMI

June 2007, Milos

European Commission

DG Environment – G4

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Natural resources



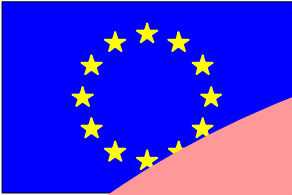
RAW MATERIALS
Minerals-fuels
Biomass



FLOWS
Solar
Wind
Tidal



MEDIA
Air
Soil
Water



What is the Issue ? The Life-cycle

**Growing
technosphere**

**Extraction:
16 tons**

**To physical stock:
10 tons**

**Disposal:
6 tons**

Source

Sink



Threats to ecosystem services !



Objectives and Approach



1. **Decoupling** - reducing negative impacts of resource use in a growing economy
 2. Improving resource efficiency
 3. Focus on key economic sectors
- Long-term framework (25 years) – 5 year revision-cycle
 - Knowledge base
 - Co-ordinating function to ensure enhanced coherence and efficiency & building on existing policies
 - Life cycle thinking



Life Cycle Thinking



Environmental and health impact modelling

Climate change, Acidification, Summer smog, Ecotoxicity, Eutrophication, Ozone layer depletion, Radioactive releases, ...

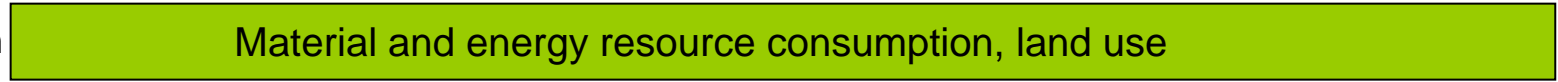
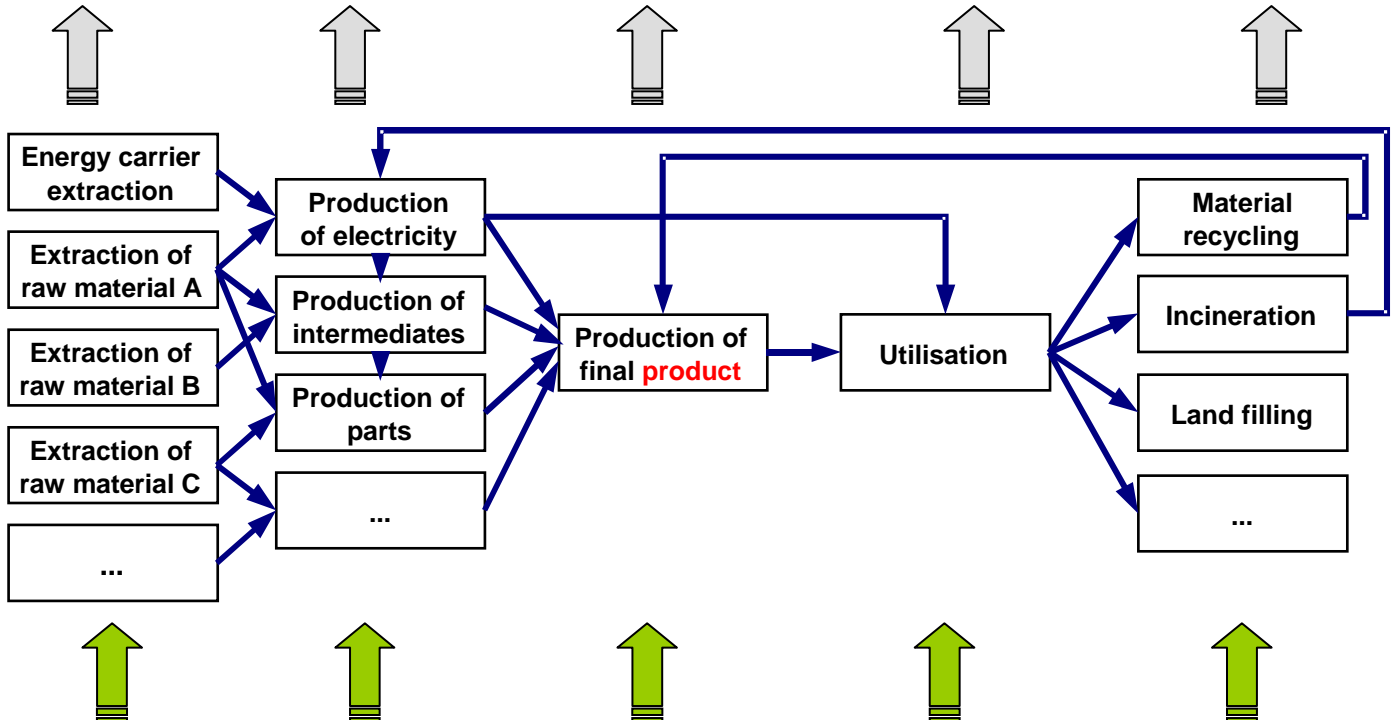
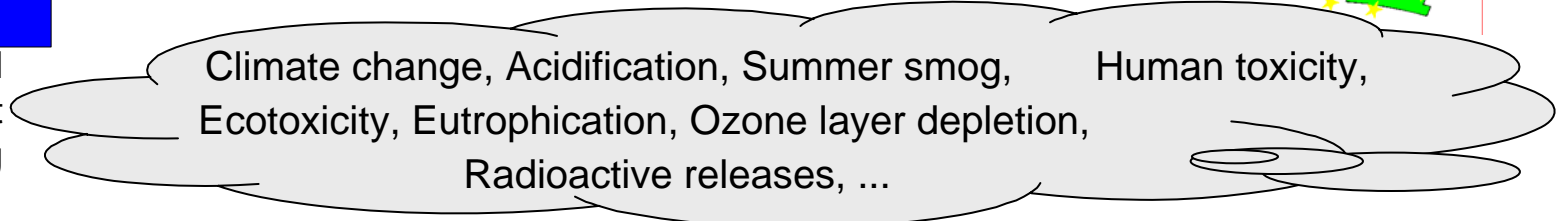
Human toxicity,

Emissions

Life Cycle Inventory

Resources

Resource depletion



Life Cycle Phases

Production phase

Use phase

End-of-Life phase



Benefits of Life Cycle Thinking



- **Include whole life cycle of product:** avoid shifting-of-burdens among life cycle phases and countries
- **Consider all impacts** on the environment, human health, and resource availability: avoid shifting-of-burdens among impacts
- **Quantify impacts on absolute basis:** enable direct comparisons of options, also of very different systems that have same functional unit
- ✓ Identifies opportunities for improvement of goods and services
- ✓ Supports more coherent and science-based policy making
- ✓ Allows flexible implementation and measures by private sector



Actions



1. Global dimension: **International Panel**
2. MS involvement for national measures by establishing an **High Level Forum**
3. Voluntary participation of sectors in economic **sector initiatives**
4. Building the knowledge base: **Data Centre**
⇒ To inform policy-makers
5. Development of **indicators**



Actions



Building the knowledge base

- Data Centre:
 - To bring together available information
 - To monitor and analyse
 - => *To inform policy-makers*
- Data Centres on natural resources + products + waste
- EUROSTAT with DG ENV, JRC, EEA
- State of play: Terms of Reference – setting up
- Link with European Platform on Life Cycle Assessment (LCA): Supporting business and policy making with reference data and recommended methods on LCA for better practice in LCA use and interpretation



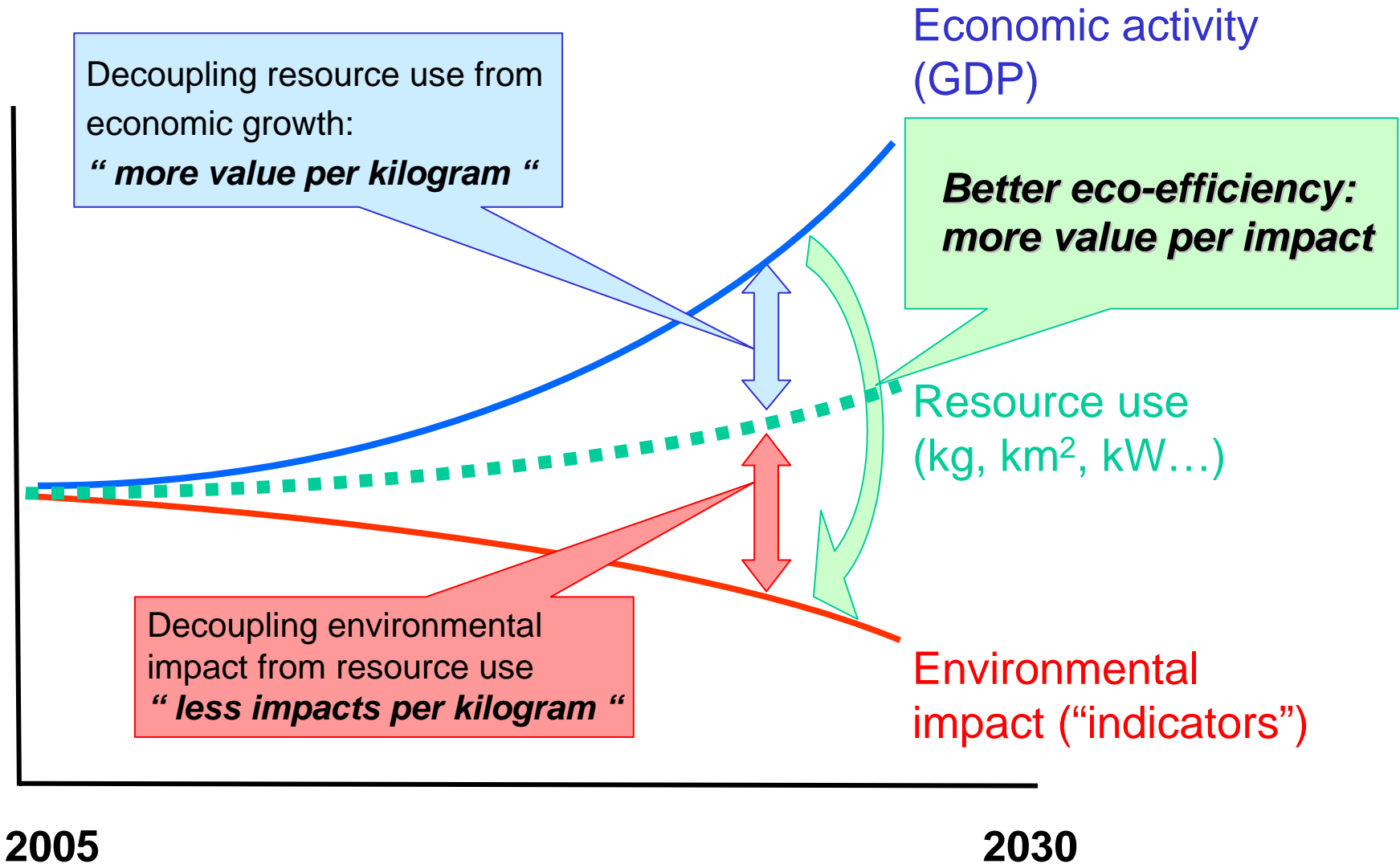
Actions: *Development of indicators*



- **Objectives:** To measure progress, identify priorities and set targets
- By Eurostat, together with JRC and EEA - available in 2008
- How to measure “Environmental impact”?
- Related with **TARGETS**
 - Example in Annex 1 of the Resource Strategy: **in EU 15:**
“expect a rate of 3% resource productivity improvements per year for the period 2000-2030”
 - Council conclusions 23 Oct 06: “calls on the COM and MS to set **targets** for resource-specific impacts and eco-efficiency in order to complement the strategy by the year 2010”

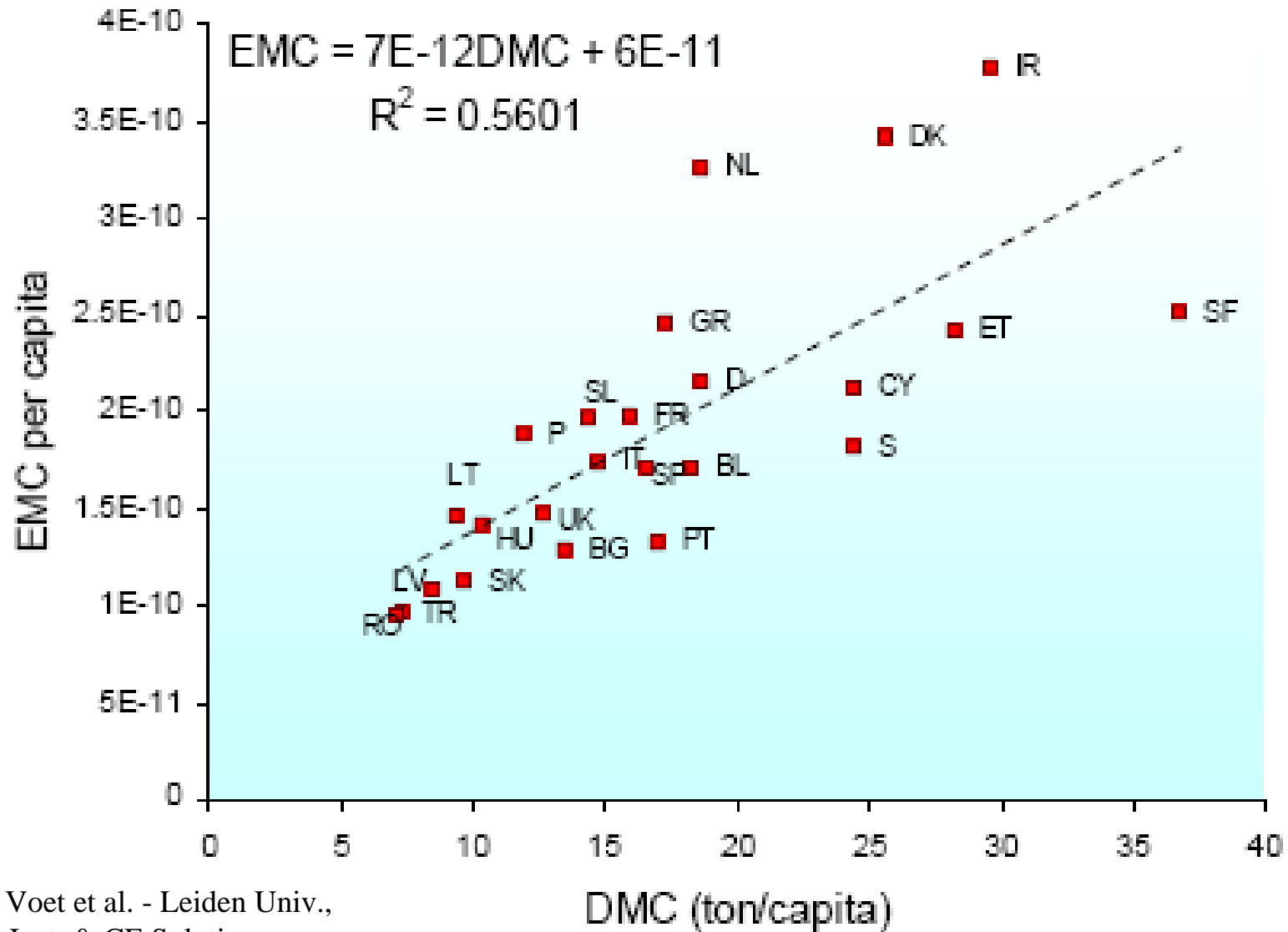


Objective: Decoupling



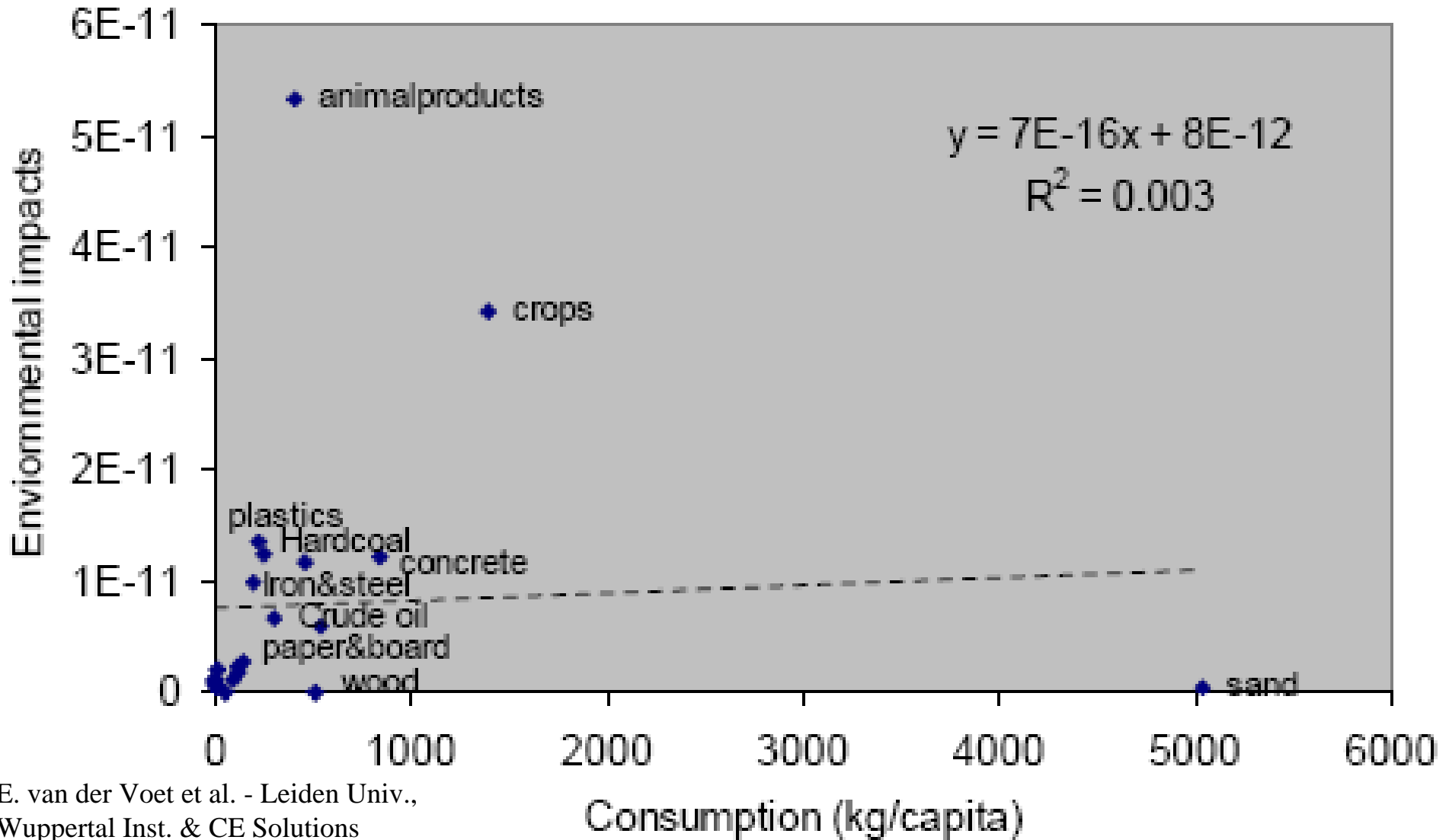


Link impact – resource efficiency (1)





Link impact – resource efficiency





Link impact – resource efficiency (3)



=> What is the correct aggregation level for indicators?

E. van der Voet et al. - Leiden Univ., Wuppertal Inst. & CE Solutions

- “At the most detailed level, the level of individual materials, there seems to be no relation whatsoever between the weight of a certain material and its impacts.”
- “there appears to be a correlation between the [EMC-DMC relation for countries], which is [...] significant. This probably implies that the composition of material consumption does not differ that much between countries which are to a certain extent comparable in terms of their market structure and have extensive trade flows with each other.”
- “DMC is not appropriate as there is no linkage between environmental impacts and the underlying consumption in terms of kilograms. Also if the natural resource strategy is to contain long-term goals [...] one may question whether on such a long time-frame the changes in impacts will still correlate with the kilograms.”



Existing projects (1)



- Eipro – Environmental Impact/ of PROducts. 70-80 % of impacts from:
 - food & drink
 - housing (buildings & occupancy)
 - (private) transport
- Impro (in progress): environmental IMprovement of PROducts
 - passenger cars
 - meat products
 - housing
- European Platform on Life Cycle Assessment (LCA)
- Green paper on Market Based Instruments to be completed soon

Eurostat	JRC	EEA
indicators and data DATA CENTRE	life-cycle impacts of natural resources	indicators and data



Existing projects (2)



- Potential of the Ecological Footprint (EF) for monitoring environmental impact:
 - Analysis of the EF as an aggregated indicator
 - Analysis how other assessment tools complement EF
 - e.g. HANPP (Human Appropriated Net Primary Productivity) index, and
 - SEEA (System of Environmental and Economic Accounts)
 - Elements for improvements of the EF methodology
- Strengthening the Knowledge Base:
 - Overview of significant resource trade flows and their environmental impacts
 - Database for world-wide contacts and inventory on natural resource flows and impacts
 - An expert discussion with stakeholders through workshops



Actions

Sectoral Initiatives



- Voluntary participation of sectors in economic sector initiatives:
 - ❑ EU Strategy for Growth and Jobs
 - ❑ Implementing the Community Lisbon Programme:
A policy framework to strengthen EU manufacturing – towards a more integrated approach for industrial policy
- Together with DG ENTR
- Environmental reporting, indicators, targets, measures ...



Actions

Subsidiarity



- MS involvement:
 - National measures and programmes
 - National monitoring mechanisms
 - National targets where possible
- Facilitator: High Level Forum / Meeting
 - “waste prevention and resource efficiency in a life-cycle perspective”
- Set up in 2007



Actions: *Global Dimension*



International Panel on the Sustainable use of Natural Resources

- Objectives:
 - To provide independent advice
 - To contribute to knowledge base
 - To provide capacity building in developing countries
- Members (15-20): Internationally recognised experts
- With UNEP – which will host the Secretariat in Paris
- Trust Fund: to enable governments to support the Panel
- Board: decides on work programme
- ☑ Inaugural Panel meeting foreseen for Autumn



Achievements in the EU



- Significant **degree of political buy-in** at various levels
- Commitment by Commission AND European Council in **renewed Sustainable Development Strategy**:
 - “avoid overexploitation of renewable resources, apply the concept of life-cycle thinking, break the link between economic growth and environmental degradation”
 - “build on the EU Strategy on the sustainable use of natural resources”
- Council, in its conclusions of 23 October 2006,
"welcomes the Commission's communication"
- European Parliament voted on 23 April 2007 on a resolution supporting the objectives and asking for more actions and targets



One Step ahead: SCP



- Forthcoming EU Sustainable Consumption and Production (SCP) Action Plan:
 - the Resource Strategy serves as conceptual framework
 - the Action Plan focuses on specific, implementable measures.
- Preliminary ideas for the SCP Action Plan (including a better coherence of existing initiatives):
 - Extension of eco-design
 - Green private procurement
 - Market-based instruments
 - Environmental targets (ETAP)
 - Reinforce Eco-label scheme and Eco-Management and Audit Scheme (EMAS)
 - Promoting sustainable consumption



The way forward



- ❖ The Resource Strategy offers a conceptual framework and an overarching objective
- ❖ It offers tools and orientation for other policies – e.g. *Waste - SCP* !
- ❖ Challenges:
 - ✓ To have full commitment to the decoupling goal and life-cycle thinking
 - ✓ To integrate this approach into all policies
 - ✓ To develop concrete measures

This is not the end of a process but just its beginning

**We need your contribution to develop
the right policy indicators**



Thank you for your attention

DG ENV - G4

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<http://europa.eu.int/comm/environment/natres/index.htm>