

Resource efficiency in Europe

Overview of policies and approaches to
resource efficiency in European countries

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Plan development

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About the European Environment Agency (EEA)

Specialised agency of the European Union, established in 1994 in Copenhagen

EEA provides information on the state of environment, trends and outlook, to support policy making

32 member countries: EU-27, Iceland, Liechtenstein, Norway, Switzerland and Turkey.

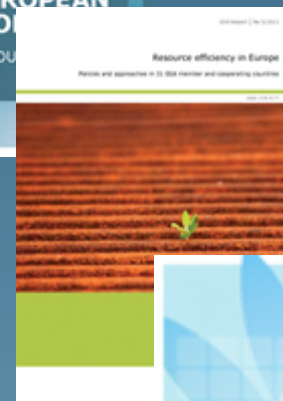
6 cooperating countries in the West Balkans

Covering over 500 mln people, and about 1/3 of world GDP

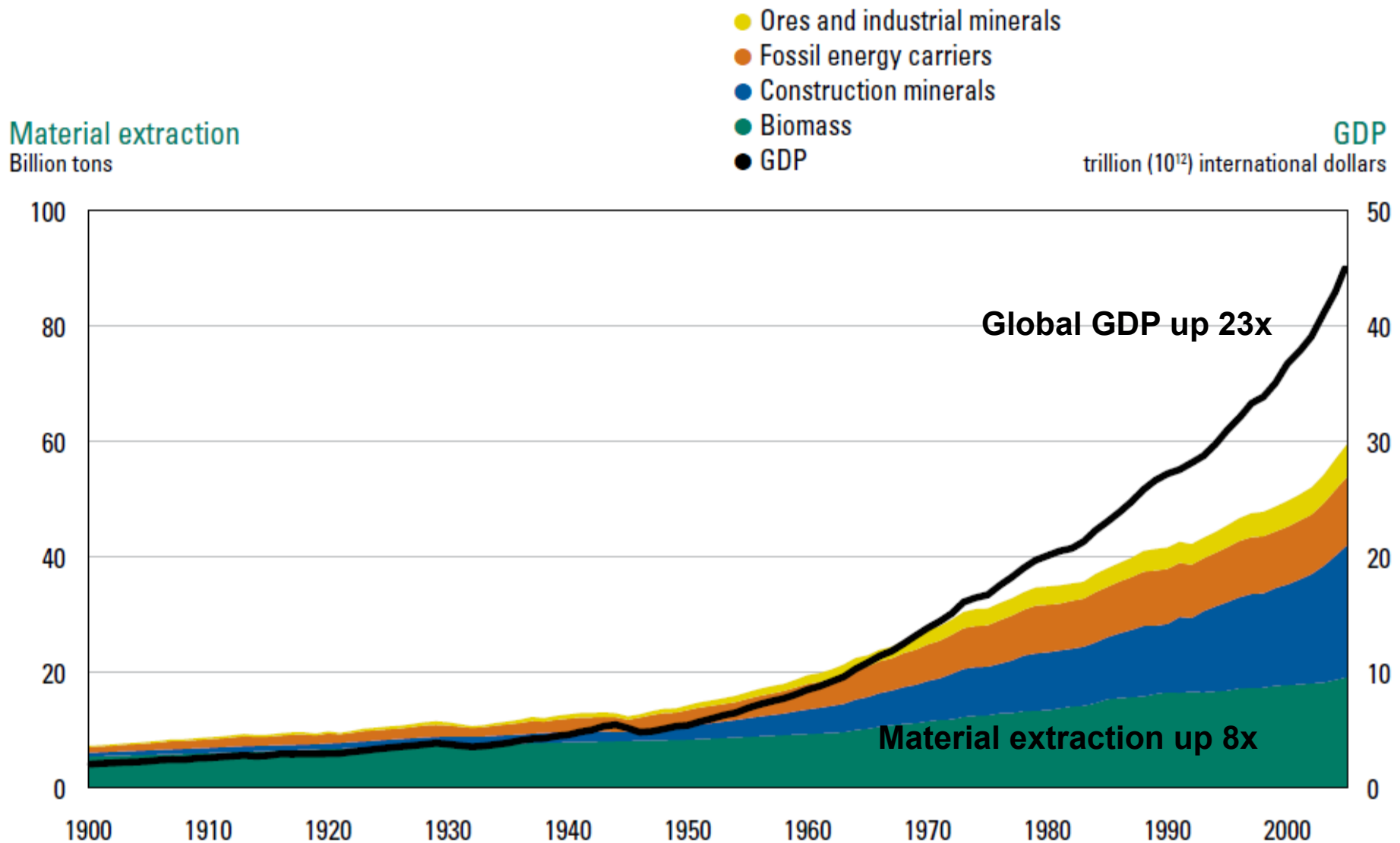


Context of our work on resource use / resource efficiency

- 2010** SOE reports + thematic assessments
- 2011** Country survey of RE policy initiatives
- 2012** Indicator report Green economy
Green CAP report
RE policy instruments - showcases
- 2013** Report on measuring environmental pressures from consumption and production
Indicator report RE and health
- 2015** State of Environment and Outlook report

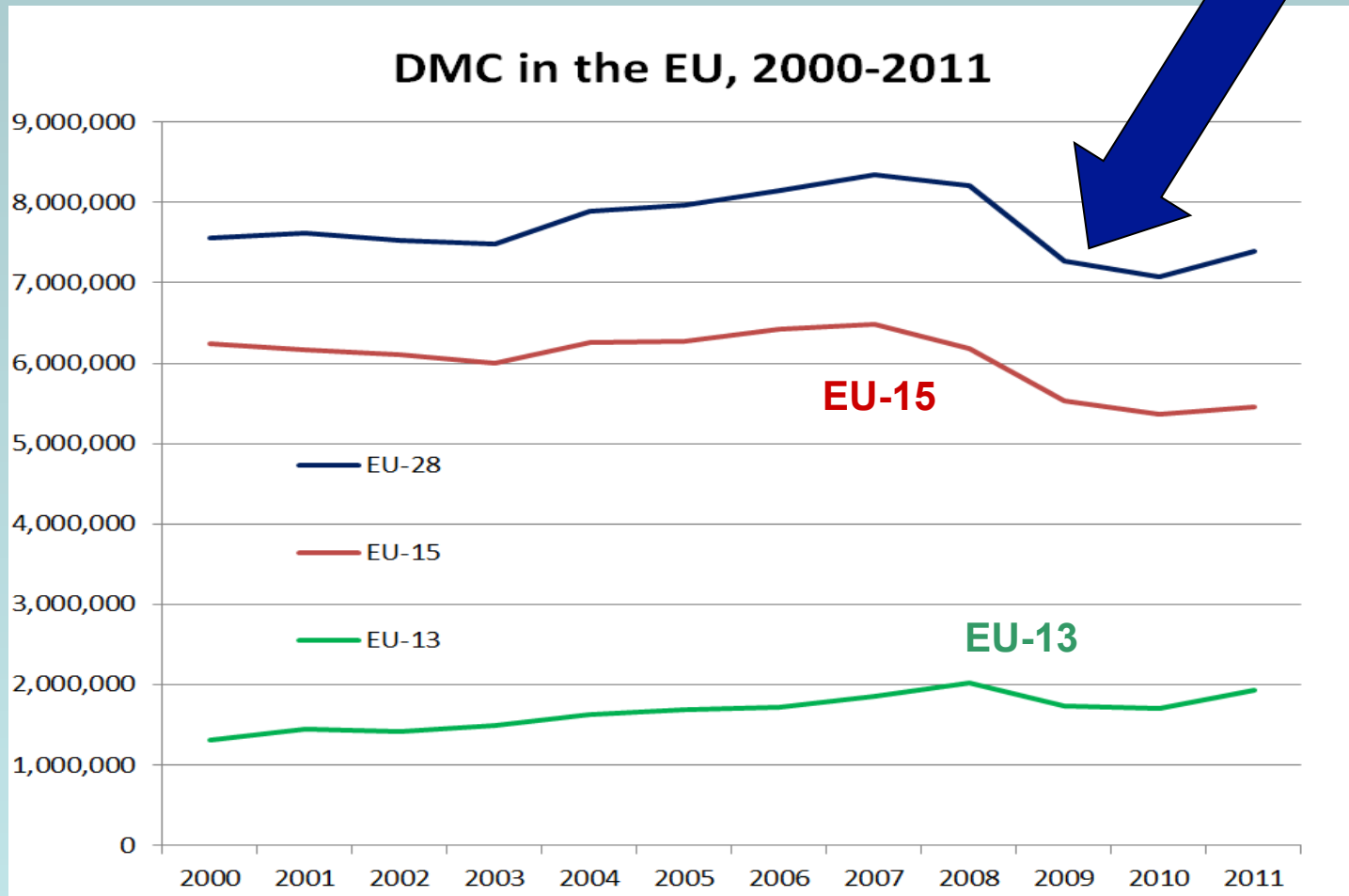


Global GDP and extraction of materials 1900-2005

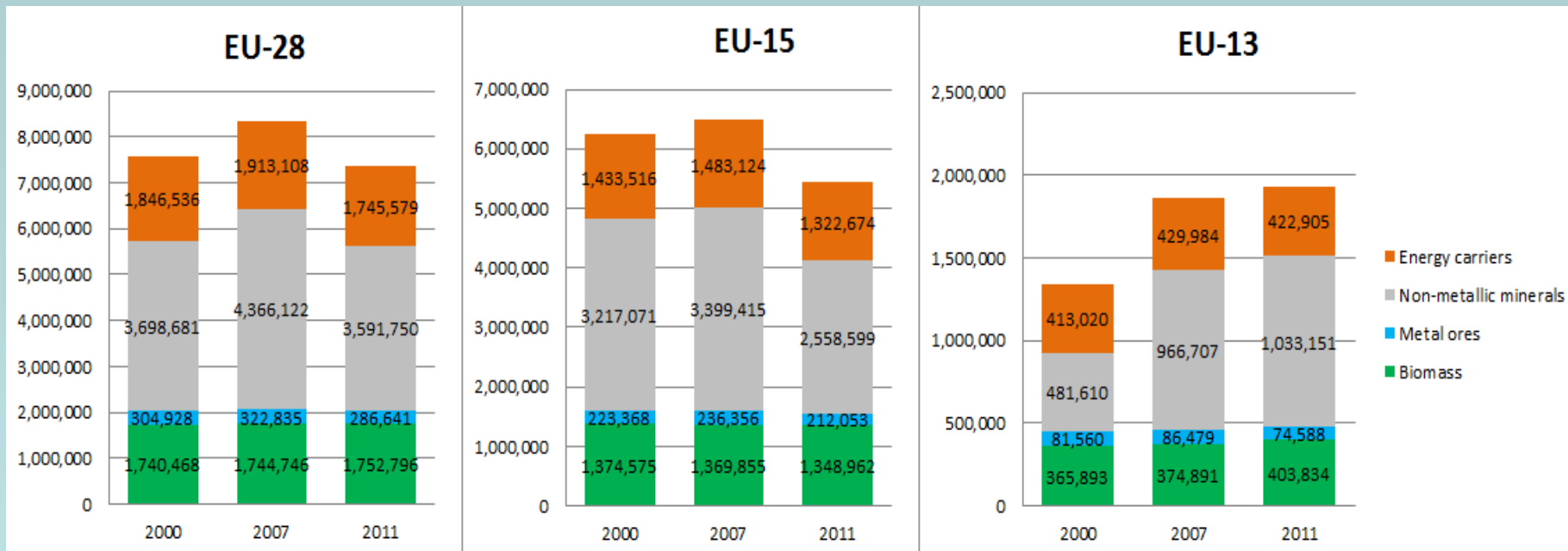


DMC in EU-28, 2000-2011

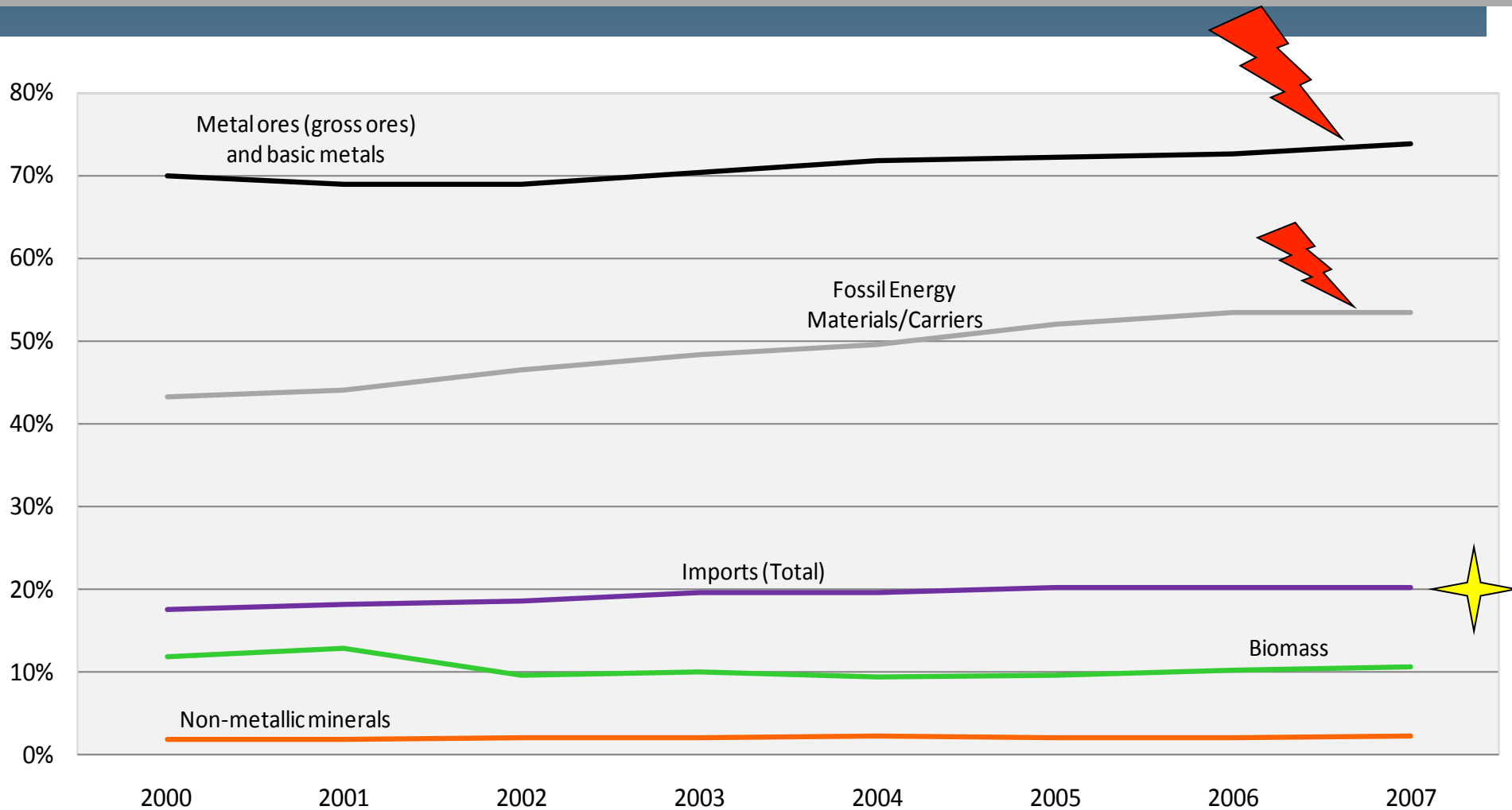
(thousand tons)



Total DMC by category 2000, 2007 and 2011

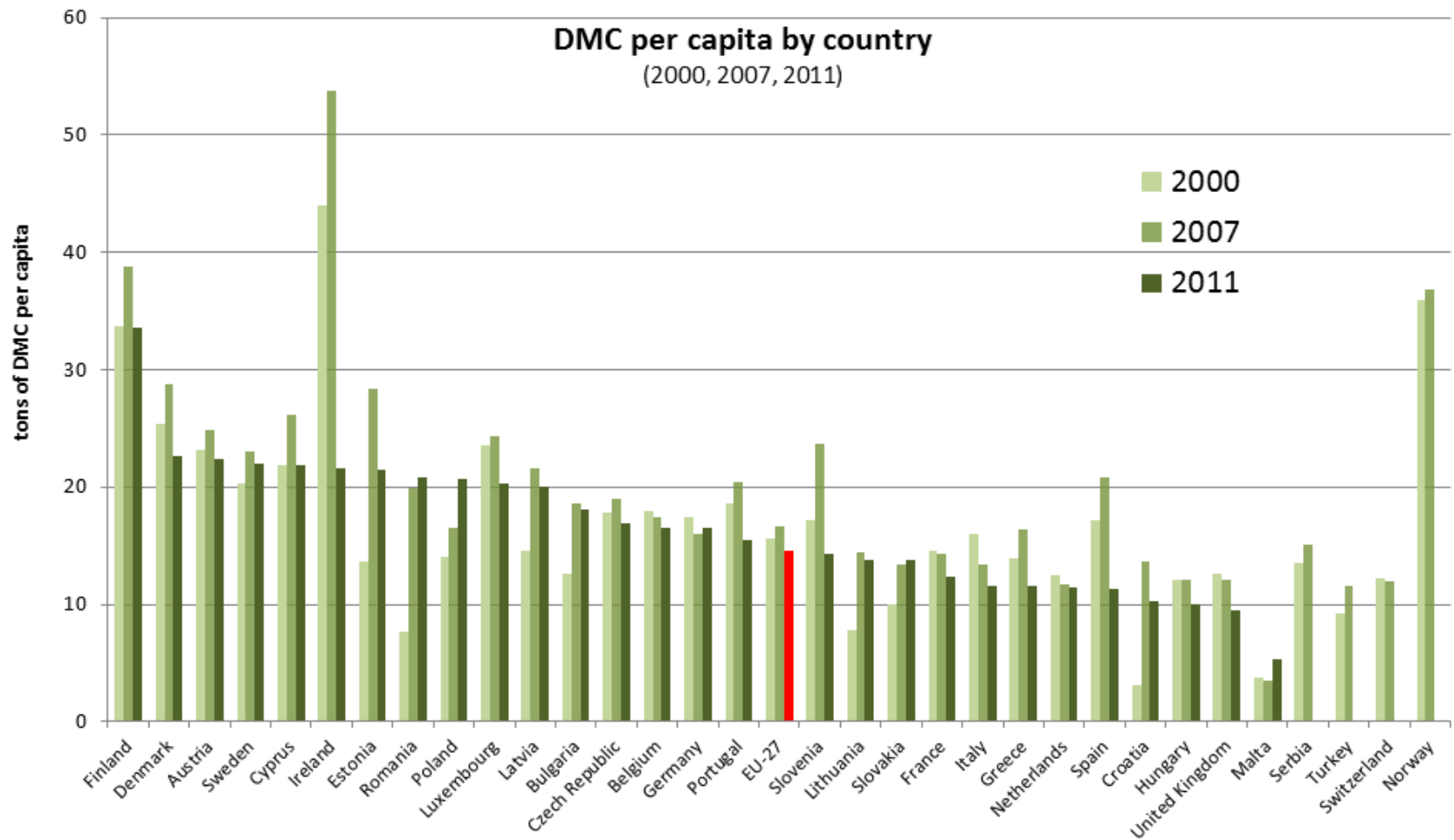


Share of imports in EU-27 use of material resources, by category (2000-2007)



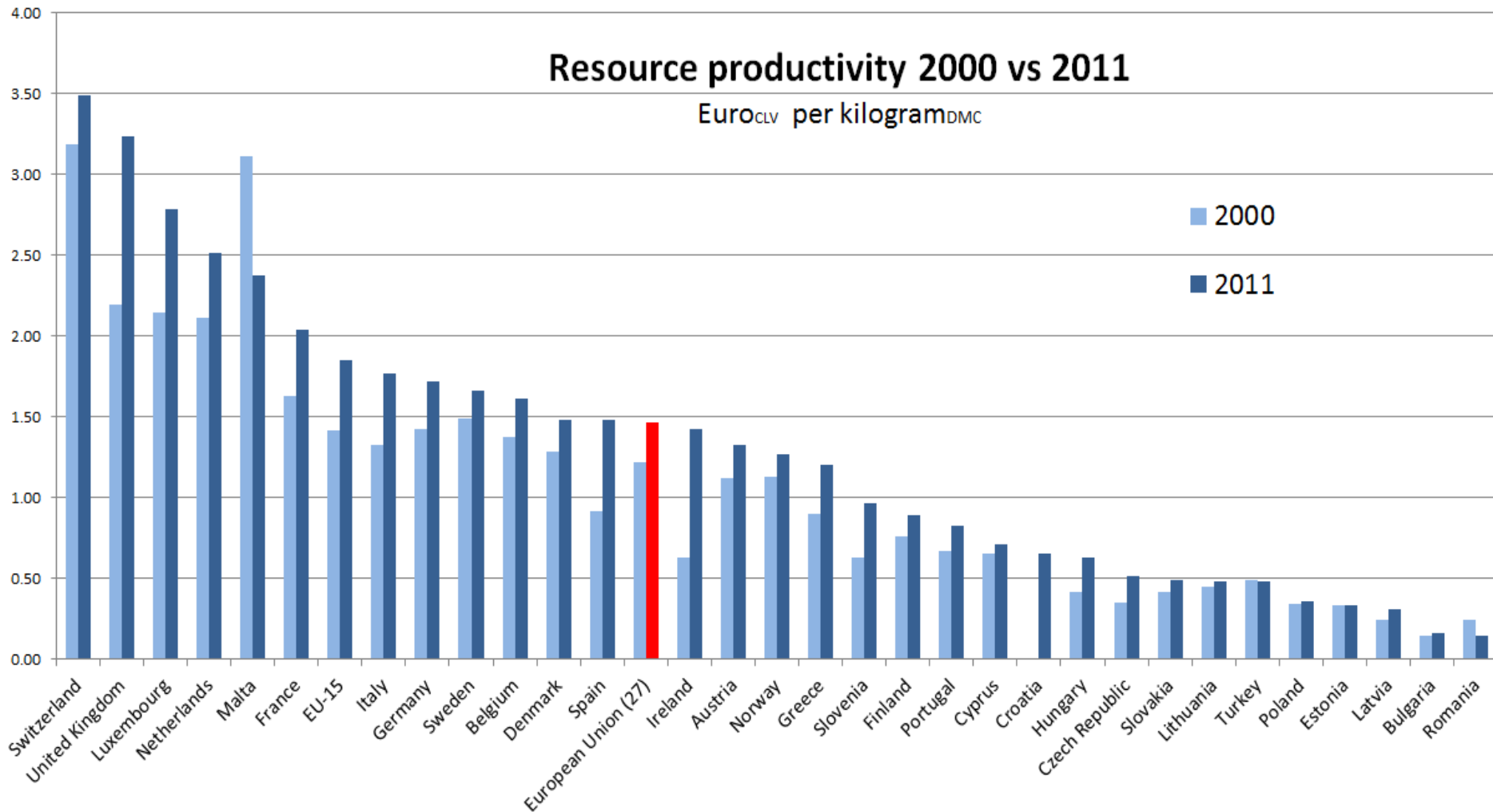
DMC/capita by country

2000, 2007, 2011



Resource productivity by country

Euro/kg, 2000 vs 2011



7 Environment Action Programme:

one of key objectives is to ... “turn the European Union into a resource-efficient, green, and competitive low-carbon economy”



2011 Roadmap to a resource efficient Europe

Member States should:

- *Develop or strengthen existing national resource efficiency strategies, and mainstream these into national policies for growth and jobs (by 2013);*

Various interesting policy initiatives in place in the member states ➡ opportunity for sharing experience and information exchange



Detailed information available at:
www.eea.europa.eu/resource-efficiency

- Thirty one detailed ‘country profiles’ available on the EEA website
- An analytical report “Resource efficiency in Europe” in 2011



Follow up work

- In the Spring of 2012, EEA member countries provided ‘good practice’ examples of policy instruments used to support resource efficiency
- In 2013, a series of webinars (‘e-meeting’) with EEA member countries to share their experience with implementation of resource efficiency policies.
- In 2014-2015 EEA will prepare an update of the 2011 report

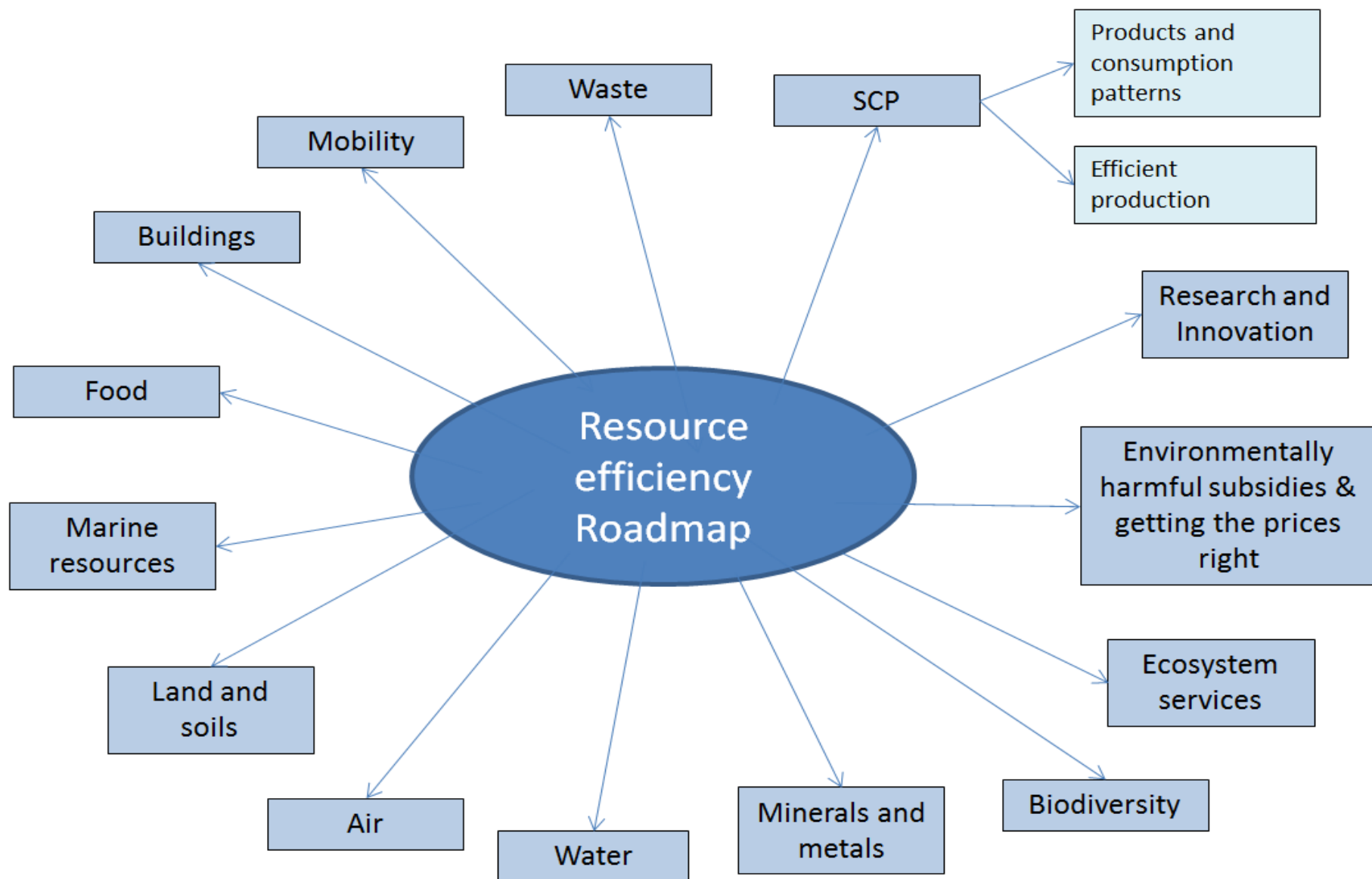


Some reflections on the definitions of 'resources' and 'resource efficiency'

- There is no generally accepted common understanding of the terms “resources” and “resource efficiency” across countries
- A few countries formally define the term ‘resources’ in their policies
- Others use the more narrow term ‘raw materials’ when looking at resource efficiency
- Translation of terminology into national languages further complicates things
- Not always very clear how ‘resource efficiency’ policy area relates to ‘sustainable consumption and production’, ‘sustainable use and management of resources’, ‘green economy’, etc.



Topics addressed in the 2011 RE Roadmap



How is resource efficiency embedded in policies ?

- Few countries have a dedicated strategic document (strategy, action plan, etc) specifically on resource efficiency (➡ although all EU countries supposed to “*develop or strength- en existing national resource efficiency strategies*” by 2013)
- Instead, six broad ‘economy-wide’ strategies or action plans generally include aspects of resource efficiency :
 - National sustainable development strategies
 - National environmental strategies /action plans
 - SCP action plans;
 - Raw materials plans and strategies;
 - Strategies and plans related to climate change;
 - Economic reform programmes



Resource efficiency in sectoral policies

Two ‘sectors’ by far most commonly mentioned:

- The energy sector (including improving energy efficiency, increasing use of renewable energy sources, etc).
- Waste management and recycling sector

Additionally, frequently noted :

- Forestry and agriculture
- Water management
- Building and construction
- Transport
- Public sector (GPP)



Strategic objectives and targets for resource efficiency

- Strategic objectives are fairly general in nature, and tend to just express guiding principles
- A few countries address absolute amounts of resources used
- Concrete targets in place mainly in those areas where they are required by the EU legislation
- Targets mostly aimed at technology-driven production efficiency improvements ➡ few initiatives aiming to steer consumption or manage demand
- Limited experience in addressing consumption impacts or ecosystems resilience



A sample of objectives and targets in place

Examples of targets on resource efficiency reported by countries

- Doubling of the **abiotic material productivity** by 2020 (Germany)
- Doubling the **energy productivity** by 2020 (Germany)
- Reduction of Italian **TMR** by -25% by 2010, -75% by 2030 and by -90% by 2050
- 2,3 million ha **forest area** by 2013 (Estonia)
- All government **buildings** that are new, under renovation or leased must be passive by 2015 (Finland)
- Decrease in **final energy consumption** by 2050 of at least one third of the 2020 level (Finland)
- The share of **ecologically farmed areas** on all agriculture used areas shall increase to 20 % by the year 2010 (Austria)
- By 2010 extraction of **natural gravel** in the country will not exceed 12 mill tonnes/year (Sweden)
- Reduction of **land use** for housing, transport and soil sealing to the daily growth of 30 ha in 2020 (Germany)
- **Renewable energy share** had to be 49,3% of total consumed energy in 2010 (Latvia)
- Installation of 165 MW **wind turbines**, 25 MW CPS, 10 MW PV systems, 4 MW biomass, and 3 MW biogas systems until 2015 (Cyprus)
- Increase the per capita consumption of wood and wood **products from sustainable forestry** from 1.1 m³ to 1.3 m³ (Germany)
- Reducing the quantity of yearly **waste** produced by 20% (Hungary)
- At least 70% of the **construction-demolition waste** should be recycled until 2020 (Hungary)

Institutional framework

- Great variety of institutional settings and organizational arrangements for resource efficiency
- Generally, four types of Ministries involved : Environment, Energy, Economy, and Agriculture
- Sometimes overlapping competencies and usually limited inter-institutional coordination
- Some “specialised agencies” recently established to support RE policy development (Finland, Germany)
- It would appear that the involvement at the local and regional levels is rather limited – RE seen as central gov’t issue



Concluding reflexions /1

- RE has become politically recognized to some extent in most countries, but its mainstreaming into other policies is still at an early stage;
- Many countries have yet to establish an integrated approach to RE policy making;
- The focus is still primarily on energy resources and waste as established fields of environmental policy. A widening of RE policy scope to include other resources is not yet common in the majority of countries;
- Relatively few dedicated RE strategies / policies have been developed / adopted.



Concluding reflexions /2

- Targeting stakeholder groups (beyond companies and some business associations) still remains at an early stage;
- The knowledge base (also in terms of scientific evidence) for development and implementation of RE is not always readily available;
- Specialized agencies supporting resource efficiency could be a strong driver for additional capacity building, especially if connected with implementation;
- A need to increase awareness of the institutional dimensions of RE.



Next steps...



Preparing the 2015 edition of the report with an overview of countries' initiatives under the heading of resource efficiency:

- Sharing of experience
- Identifying lessons learned
- Supporting policy development in countries
- Expanding the knowledge



Thank you !

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