



Regional Consolation on the Implementation of the UN 2030 Agenda for Sustainable Development in Central and Eastern Europe

11-12 April 2016
Szentendre, Hungary



REGIONAL ENVIRONMENTAL CENTER

TRANSFORMING OUR WORLD – YET AGAIN? THE SPECIAL POSITION OF THE EASTERN EU MEMBER STATES

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**Regional Consultation on the Implementation of the UN 2030
Agenda for Sustainable Development in Central and Eastern
Europe**

**Organized by Regional Center for Central and Eastern
Europe**

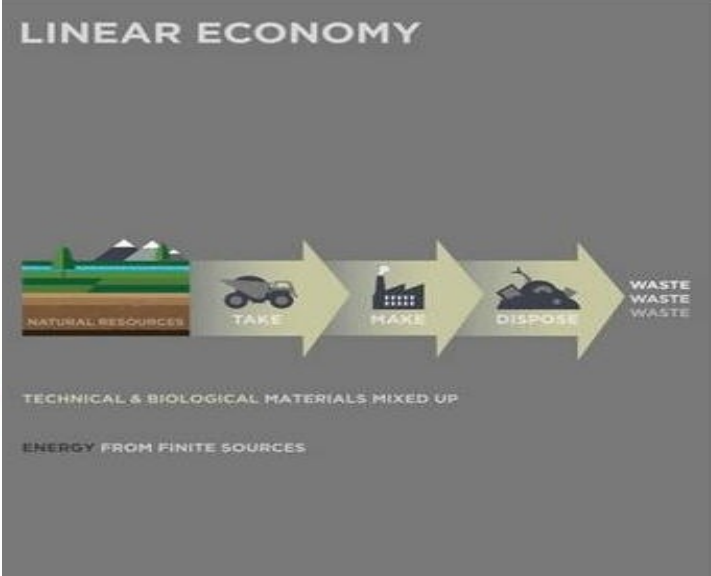
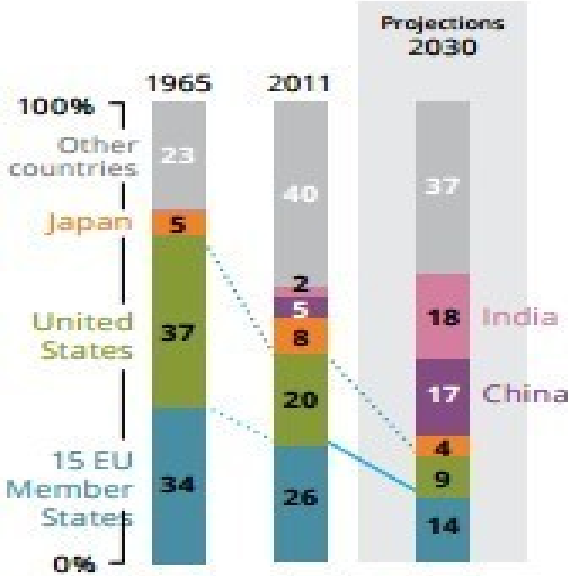
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WORLD CHALLENGES

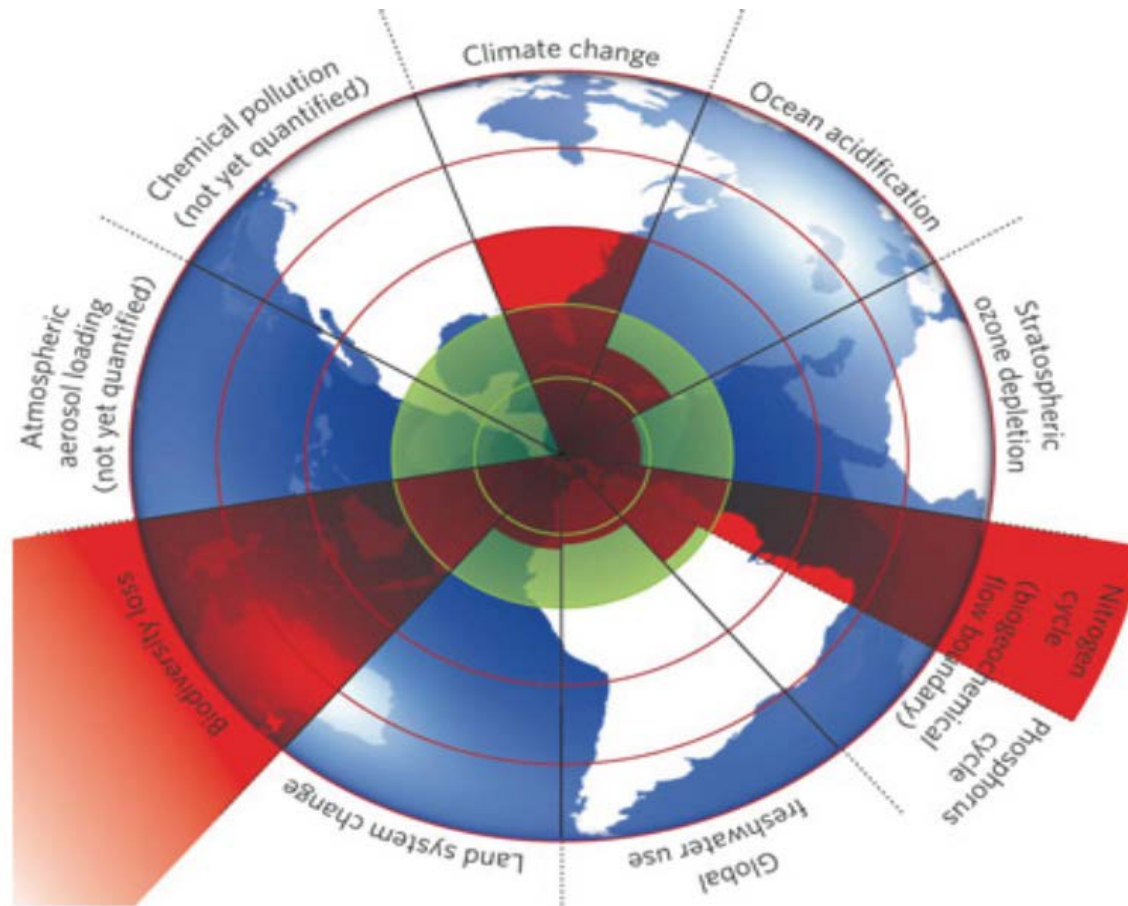


MEGATRENDS

- demographic changes and growing social problems;
- global economic changes;
- accelerating urbanisation;
- climate change and the increasing finiteness of resources;
- technological breakthroughs.



GLOBAL Environmental Overstretch



(Rockström et al., 2009)

ENVIRONMENTAL RESULTS OF TWO TRANSFORMATION OF CEE EU MEMBERS



THIRD TRANSFORMATION OF CEE MEMBERS



- 1989 and early 1990' - the beginning of building democracy and market economy

- 2004/2007/2008 - accession to
- the European Union



- towards to low-carbon and circulate economy ??????



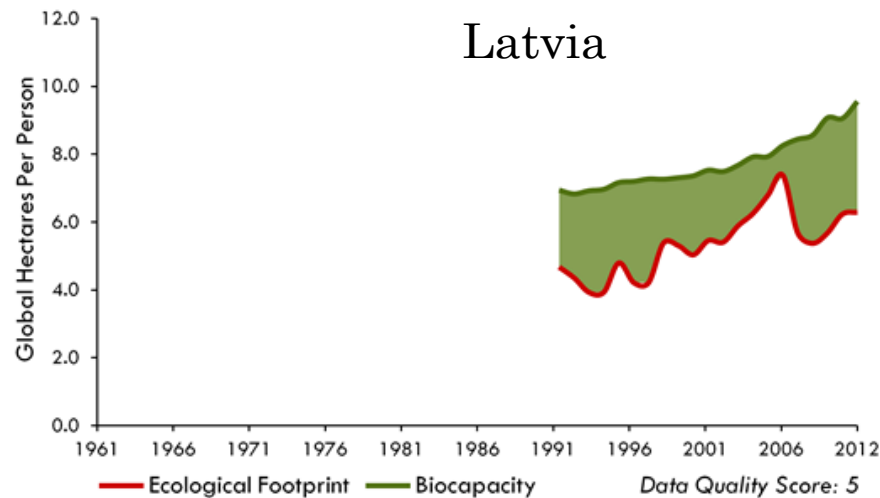
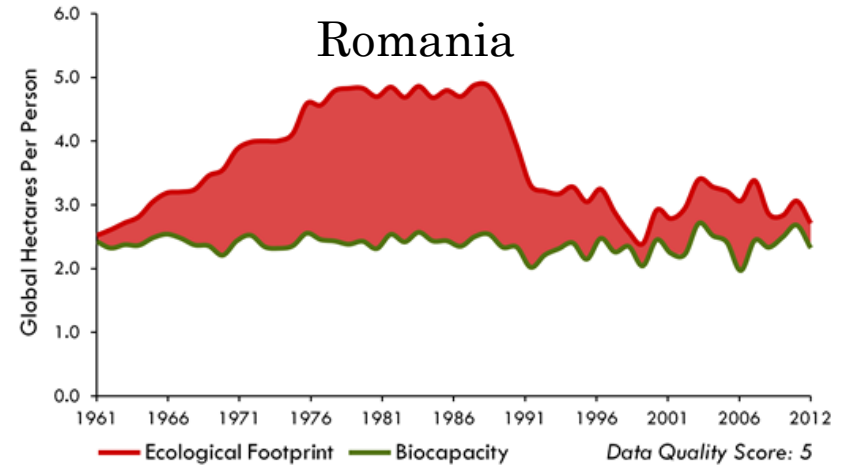
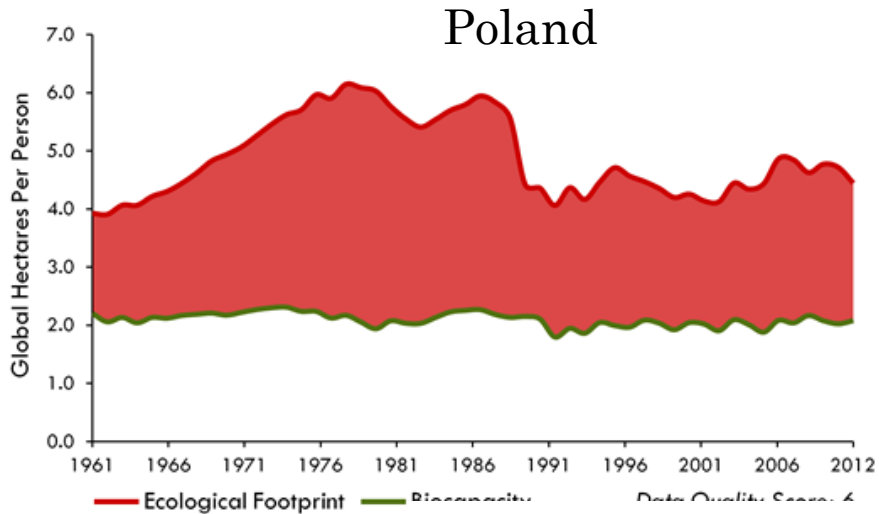
A map of Europe with various countries labeled. A large black-bordered box is centered over the map, containing text. The text is in a serif font, with 'EU members from Central and Eastern Europe, join a group of rich countries, an increasingly unfavorable characteristics for sustainable development.' The words 'rich countries, an increasingly unfavorable characteristics for sustainable development.' are in red, while the rest is in black.

**EU members from
Central and Eastern
Europe, join a group of rich
countries, an increasingly
unfavorable characteristics
for sustainable
development.**

PRESSURE ON THE ENVIRONMENT

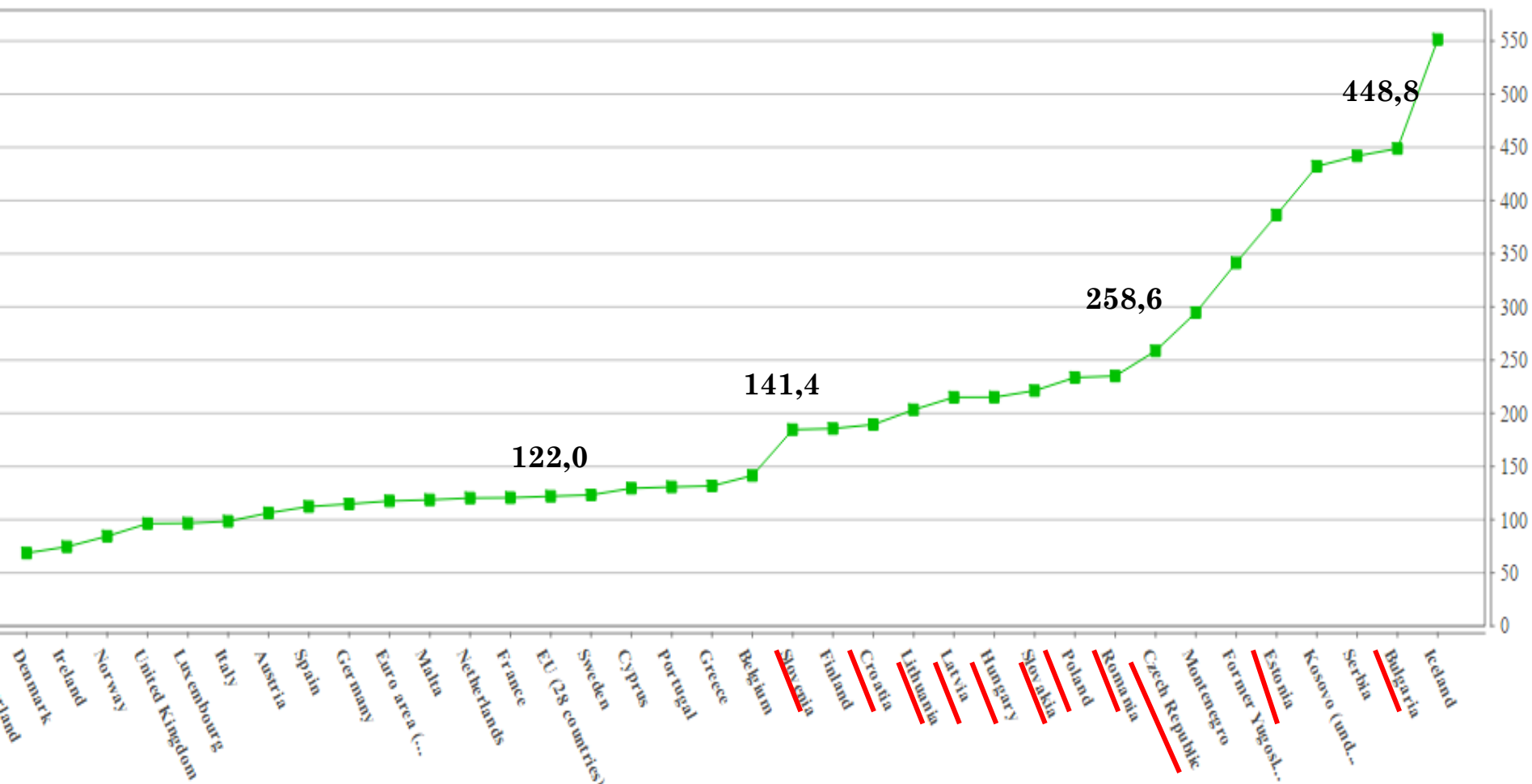
- The **different range of ecological footprint** but outlines a general increase in pressure on the environment after the accession to the EU;
- A **significant improvement in the efficiency** of resource (including water) and energy but still these indicators differ significantly from the average of the EU;
- Primary energy consumption despite economic growth did not change substantially and there are **still significant reserves in improving efficiency**
- A disadvantage is the uncontrolled development of road infrastructure and a **significant increase in the number of vehicles** in the countries covered by the analysis. Increases rapidly dominance of road transport.

ECOLOGICAL FOOTPRINT 1961-2012



http://www.footprintnetwork.org/en/index.php/GFN/page/footprint_for_nations/

ENERGY INTENSITY OF THE ECONOMY (KOE/1000 EUR GDP)



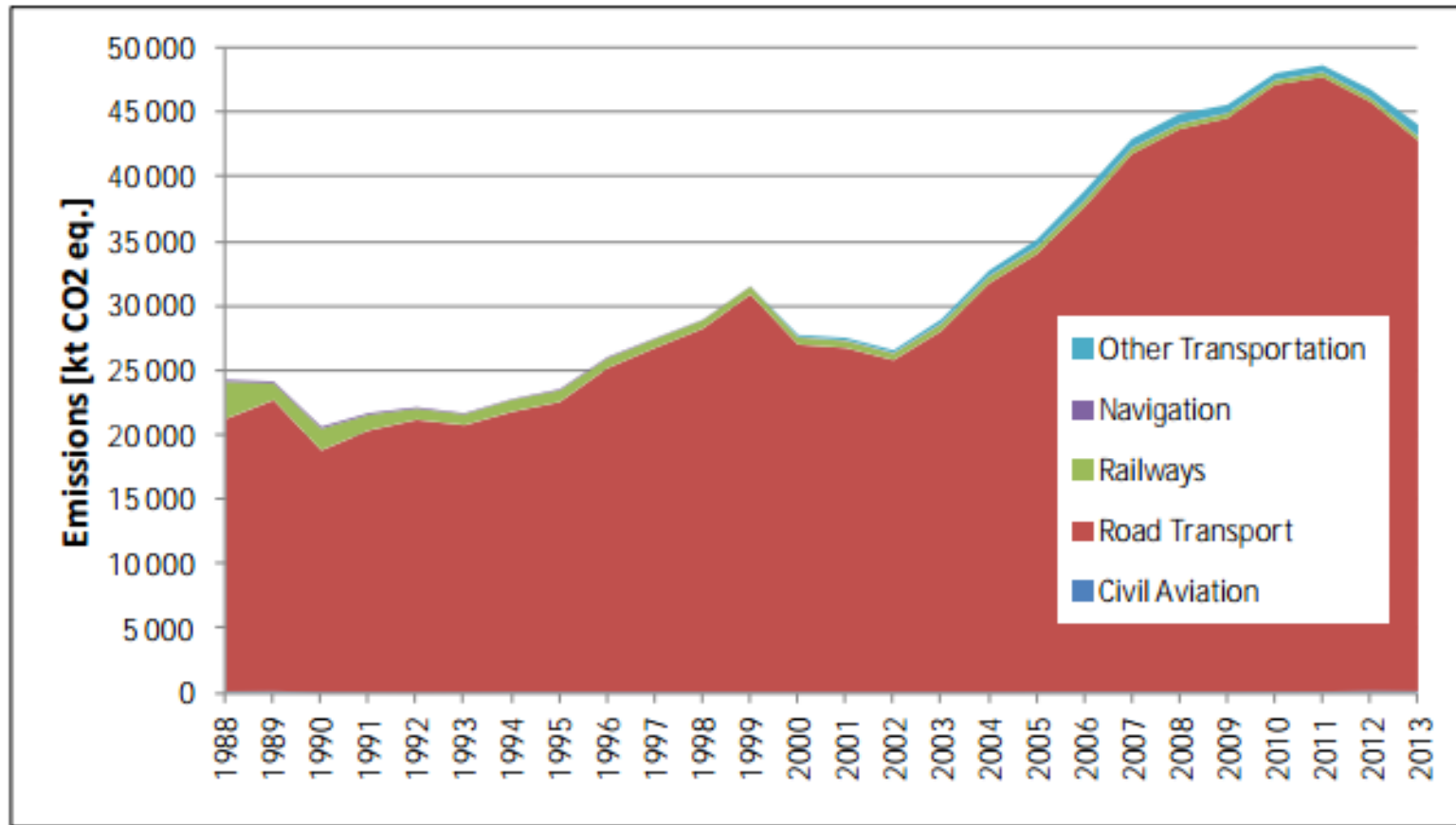
Source: Eurostat

POLLUTION AND DEGRADATION

- There has been a **significant reduction** in emissions, both air and water. The exception is **air pollution** from transport.
- Clearly outlines a trend model building **material consumption** and overconsumption on the model of Western European countries.
- Serious negligence on the management of **municipal waste**.
- Progress in **reducing** the amount of hazardous waste production
- Stimulating the process of urban sprawl and **fragmentation** of the landscape.



TRANSPORT GHG EMISSION IN POLAND (1988-2013)



Source: Poland's National Inventory Report 2015

STATUS OF ENVIRONMENT AND HEALTH ISSUES

- Ensure a satisfactory ecological status of water is **difficult**;
- Intensive fishing, some species of fish are **in danger**;
- Generally as a result of changes in land use and progressive climate change provide **to weakness ecosystem resilience**;
- One of the most serious pollutants, which can not handle many countries and the threat of rising air quality is especially associated with the issue of **low stack emission**.
- External costs are **very high** - conventional energy and transport

THE PERCENTAGE OF THE URBAN COMMUNITY OVERSTANDARD EXPOSED TO AIR POLLUTION (2009 - 2011)

	PM10	O ₃	NO ₂
Bulgaria	100	0-3	0
Czech Republic	24-89	0-16	0
Estonia	0	0-71	0
Latvia	0	0	0
Lithuania	0-18	0	0
Hungary	0-100	0-94	0
Poland	79-86	0	0
Romania	68-97	0-38	0-13
Slovakia	13-100	0-100	0
Slovenia	0-100	0-100	0
EU27	22-33	14-18	5-13

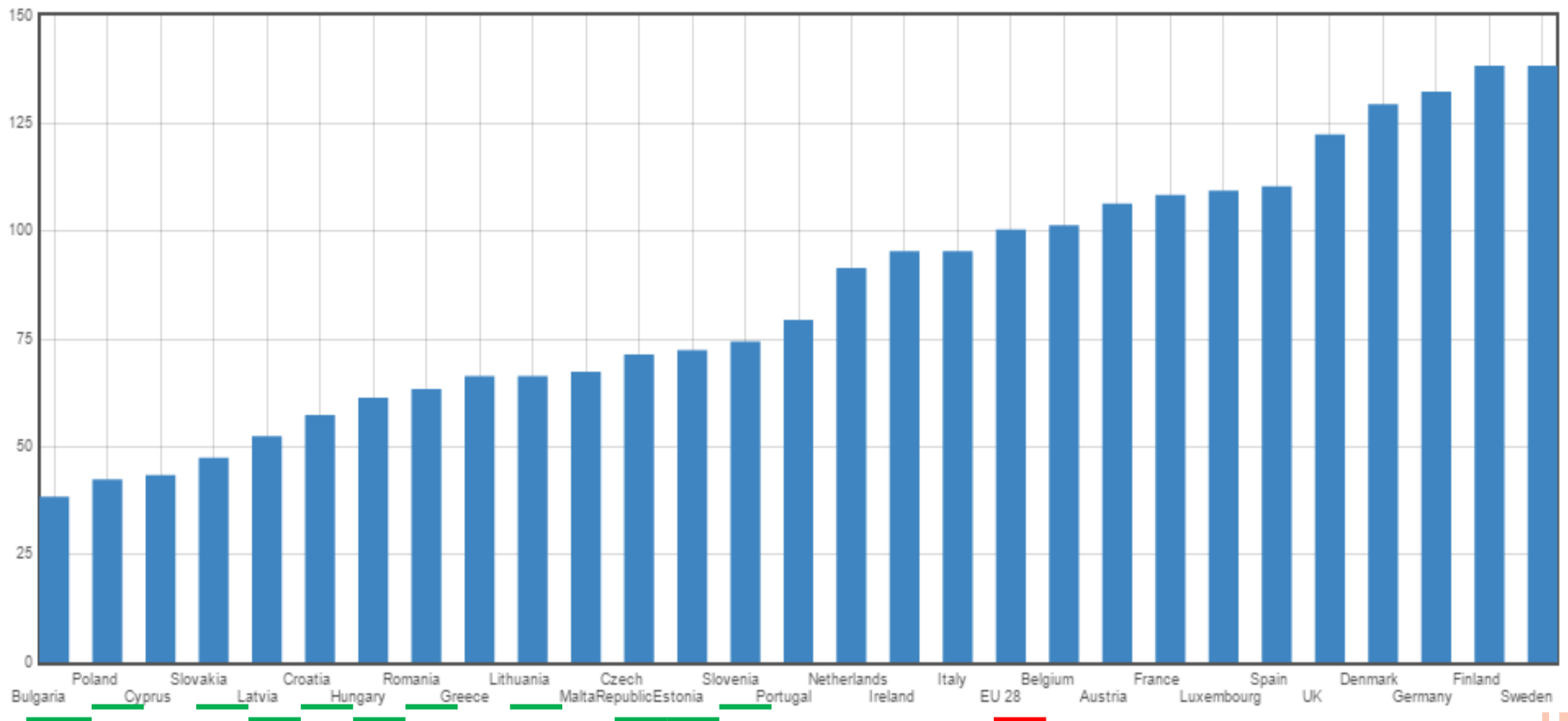
<5%	5-25%	50-75%	>75%
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POLICY AND GREEN ECONOMY

- A significant **increase** in expenditure on environmental protection
- A significant **expansion** of environmental infrastructure - catching up civilization
- **Increasing** the share of renewable energy in the energy mix
- The process of implementing efficiency improvements in many countries is **not proceeding satisfactorily**.
- Eco-innovation is **in its infancy**.
- **Slow interest** in environmental management systems in enterprises.
- **Rapidly growing** interest in ecological agriculture and processing of and sustainable tourism.
- The slow development of Natura 2000 areas and **problems** with them.

THE ECO-INNOVATION SCOREBOARD EU 2014



<https://www.google.pl/#q=eco+innovation+scoreboard+2014>

What are the three most important actions we should take to protect the environment?

	Sort waste so that it can be recycled	Reduce your home energy consumption (electricity, heating, household appliances)	Use public transport as much as possible instead of using your own car	Reduce waste by, for example, buying bigger sizes, concentrated products, second hand items or avoid buying over-packaged products, etc.	Purchase ecologically friendly products for your daily needs	Buy more local products while avoiding products that come from far away	Replace your car with a more energy efficient one, even if it is smaller or more expensive	Consider environmental aspects when you make large expenditures (e.g., traveling, buying a car, heating systems, build a house etc)	Pay a little more in taxes to help protect the environment	None of these (SPONT.)
EU27	55%	47%	38%	30%	23%	20%	16%	15%	3%	1%
EU15	54%	50%	40%	30%	21%	21%	17%	16%	2%	1%
NMS12	57%	37%	31%	30%	31%	20%	12%	11%	3%	1%

What are the two most effective ways of solving environmental problems?

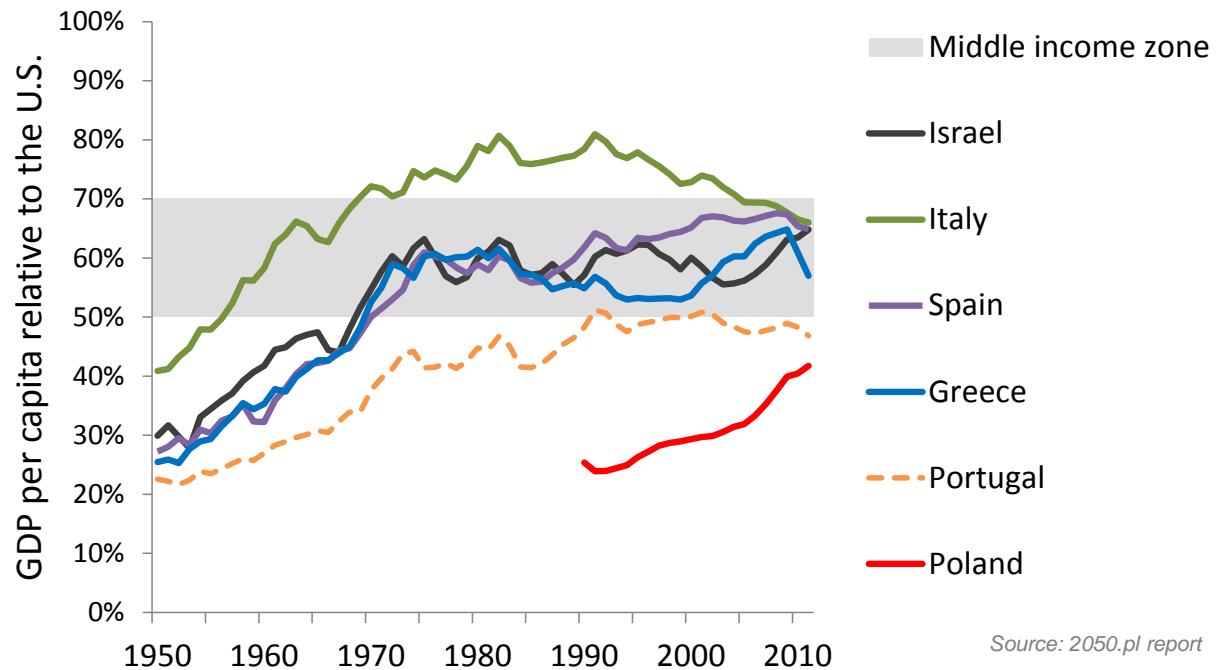
	Introducing heavier fines for offenders	Ensuring better enforcement of existing environmental legislation	Providing more information on environmental issues	Offering higher financial incentives (e.g.: tax breaks, subsidies) to industry, commerce and to citizens who protect the environment	Introducing stricter environmental legislation	Introducing and increasing taxation on environmentally damaging activities
EU27	37%	33%	30%	29%	25%	14%
EU15	36%	35%	31%	29%	24%	14%
NMS12	41%	27%	28%	28%	29%	12%

THE MESSAGE FOR THIRD TRANSFORMATION



POLISH PERSPECTIVE MIDDLE INCOME TRAP

The grey area marks the "**middle income**" zone which corresponds to approx. **50-70 percent of the US GDP per capita**

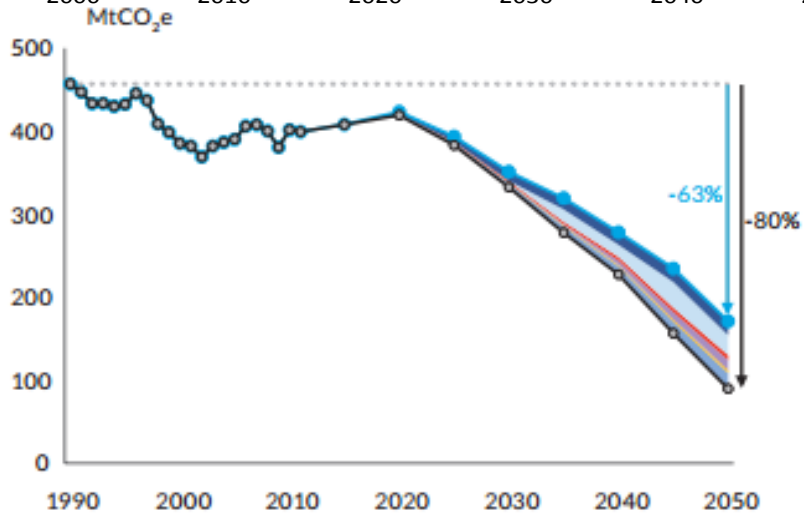
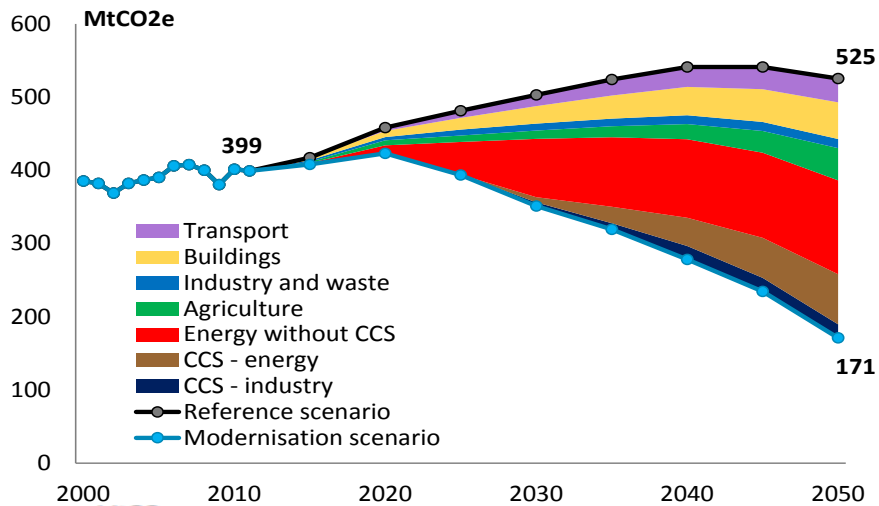


Source: 2050.pl report

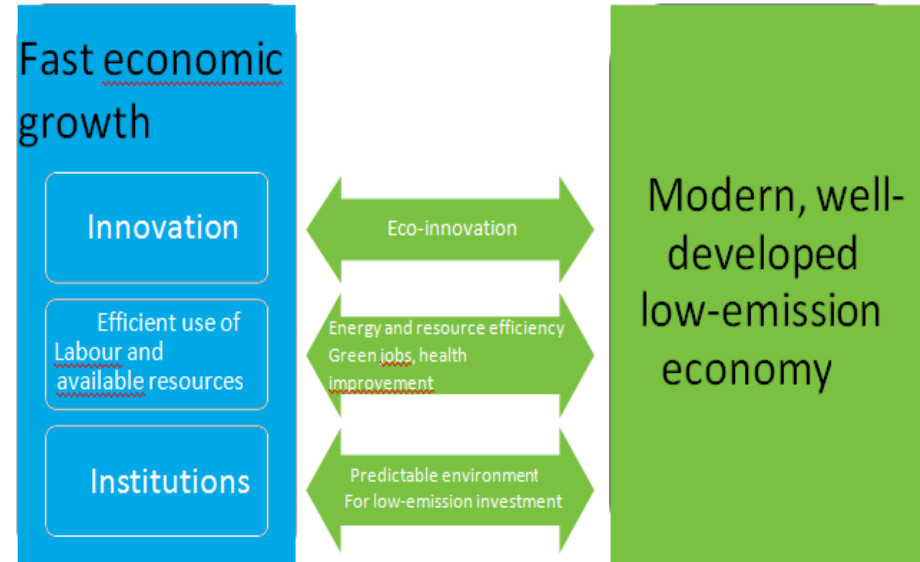
- Poland – catching up country, the growth fueled by **the low costs and the diffusion** of innovations
- Innovations, stable institutions and improved resource and labour market efficiency **needed to avoid** the growth slowdown

Source: 2050.pl. The Journey to the Low-emission Future. Edited by M. Bukowski. Warsaw Institute for Economic Studies, Institute for Sustainable Development, European Climate Foundation. Warsaw 2013

RELATION BETWEEN ECONOMIC GROWTH AND LOW EMISSION ECONOMY

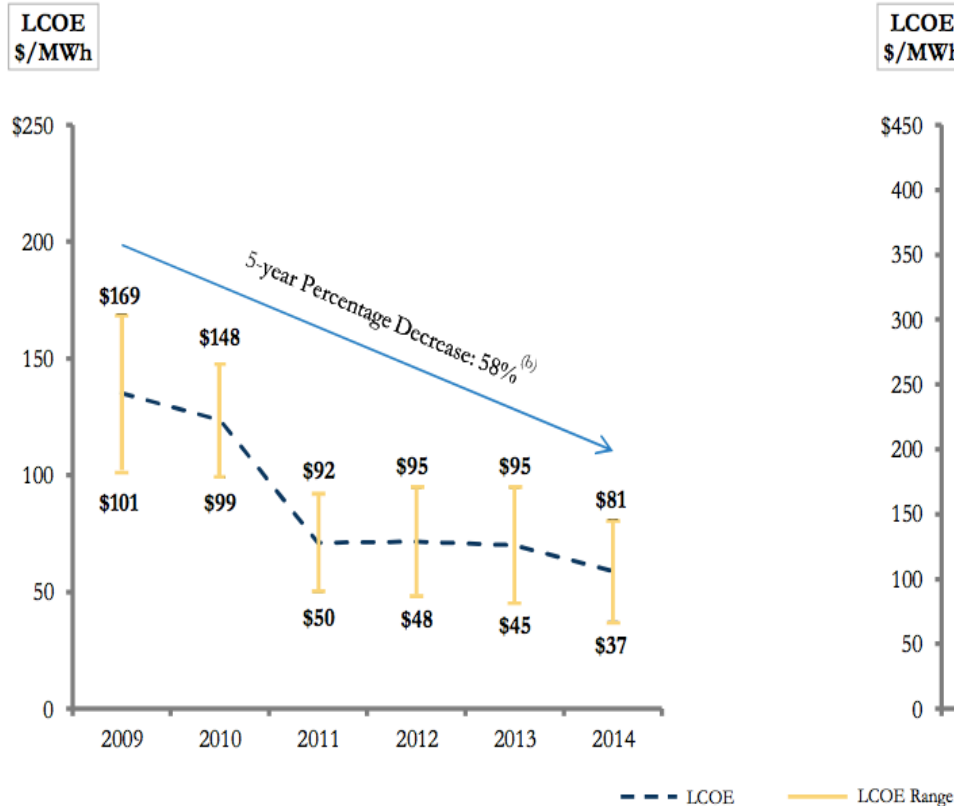


- Lower production in petrochemical industry and mining
- Zero-emission energy sector
- Faster improvement in buildings energy efficiency
- Low-emission cars
- Mix change in light industry
- Reference scenario
- Emissions to be additionally reduced



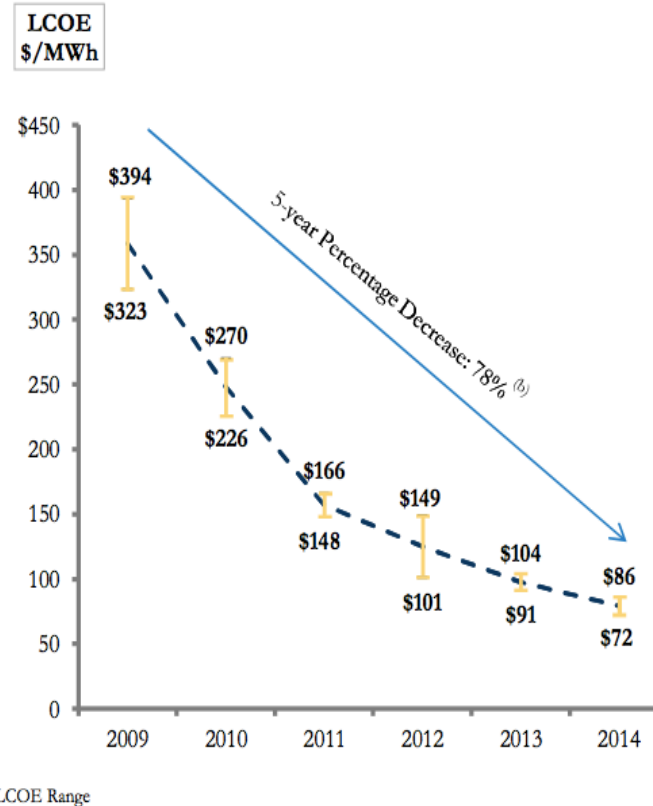
COST DECREASE - WIND & SOLAR (US)

WIND LCOE



Source: Lazard estimates.

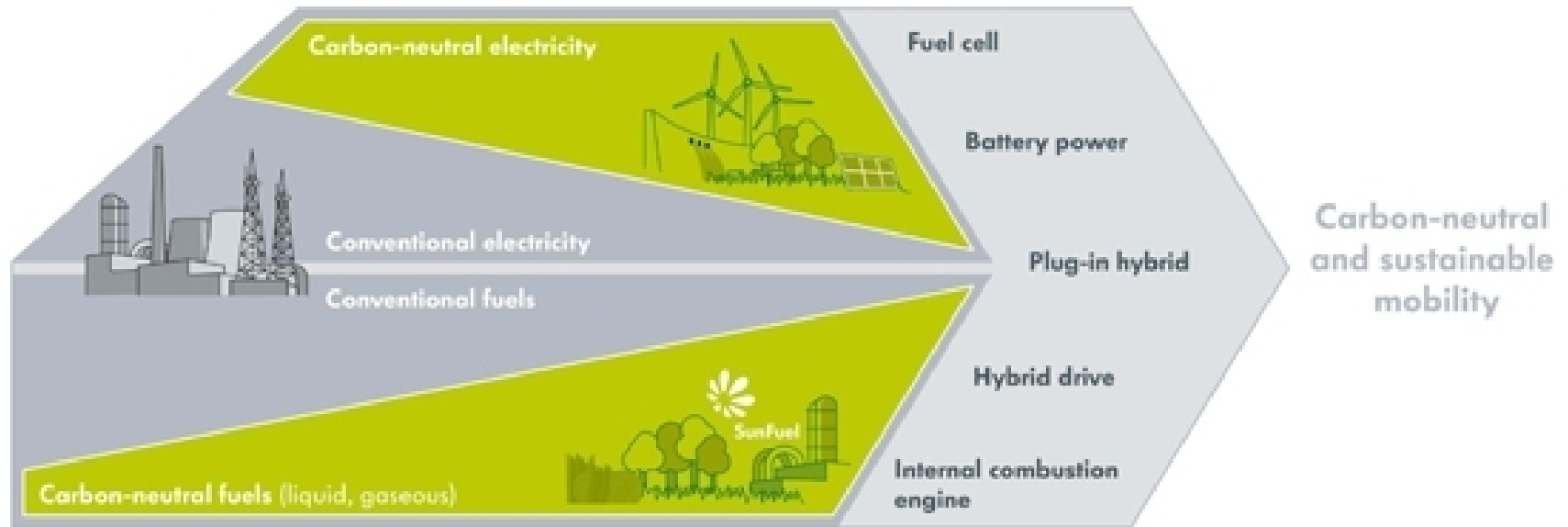
SOLAR PV LCOE^(a)



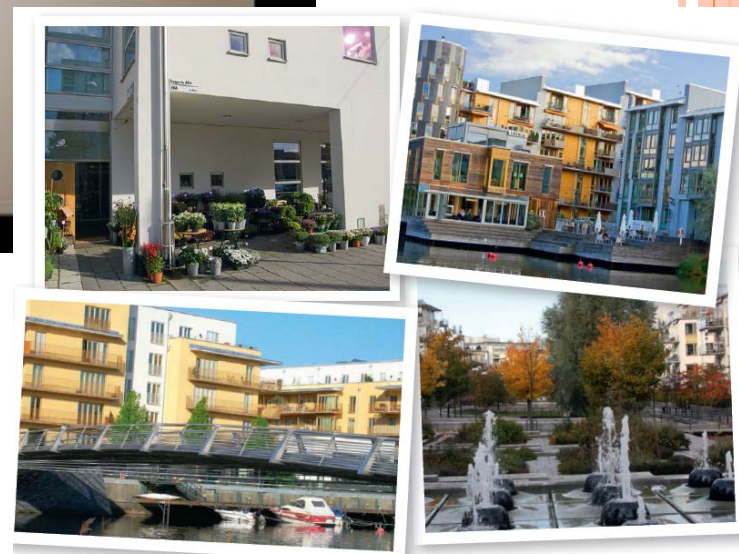
R. Fuchs. Green growth – smart growth.

SUSTAINABLE MOBILITY: REPLACING FOSSIL FUELS WITH RENEWABLE

Powertrain and Fuel Strategy



R. Fuchs. Green growth – smart growth.



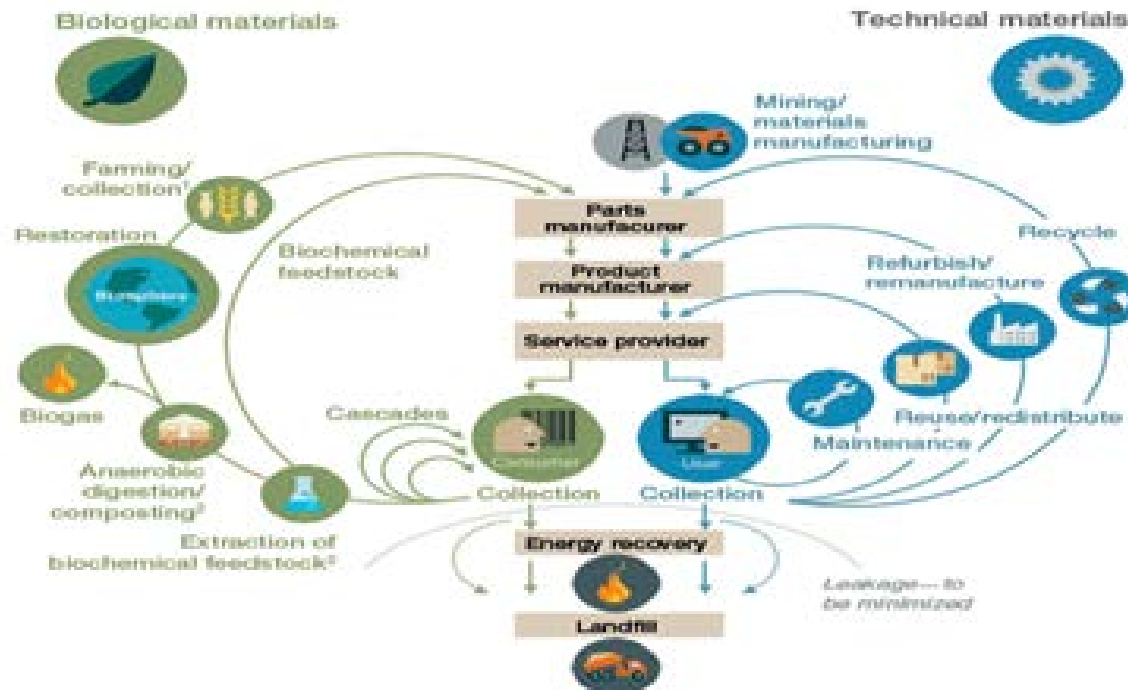
SEVEN KEY ELEMENTS OF A SYMBIO-CITY

CREATING SYNERGIES INSTEAD OF WASTE

The circular economy



The circular economy - an industrial system that is restorative by design



¹ Hunting and fishing

² Can take both postharvest and postconsumer waste as an input

Source: Ellen MacArthur Foundation circular economy team drawing from Braungart & McDonough and Cradle to Cradle (C2C)



R. Fuchs. Green growth – smart growth.

ECONOMY OF ENOUGH



- Sustainable approach, that is, economy of a steady scale, within the **limits determined** by available resources and capacity to absorb pollution;
- **Fair distribution**, that is, people have equal opportunities to gain decent living conditions;
- **Efficient allocation of resources** to support various activities so as to use the market economy capabilities, bearing in mind its strengths and shortcomings (external costs);
- **High quality of life** as the main objective of economic development, which means giving priority to human needs and ensuring decent living conditions for all.

CONCLUSION

- ✓ **CEE EU members needs to broad discussion, understanding and support from society and politicians for long term sustainable development.**
- ✓ **CEE EU members needs the long term sustainable development strategy for solve simultaneously economic, social and environmental problems.**
- ✓ **SDG can be the road to build the support for long term strategy in CEE EU members.**

TWO KEY MESSAGES

- *In the nature a free lunch not exist*
- *We borrowed our Earth from grandchildren and it is necessary to bring it in good shape*

THANK YOU FOR YOUR ATTENTION

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