

CEEweb position on how to formulate an effective roadmap towards a resource efficient Europe

General recommendations

Global demands for natural resources for food, clothes, housing and transport of people are increasing. These mounting demands on natural capital are exerting increased pressure to ecosystems, economies and social cohesion in Europe and elsewhere. These pressures are degrading the ecosystem services and lead to the decline of the carrying capacity of the planet. Therefore, CEEweb for Biodiversity is welcoming EU's new initiative on Resource Efficiency under the Europe 2020 Strategy. Using the momentum of political attention is being paid towards resource efficiency; we would like to see considering resource use limitation in the debates. This would automatically generate production and consumption patterns towards material and energy extensive structural change¹.

Decreasing the pressures on the environment can however be only effective in case of applying holistic approach which focuses on the ultimate causes of today environmental and socio-economic problems. Existing measures have failed to tackle the problems also because sectoral responses are given to seemingly disconnected issues, and their effects are often contradictory in the end. According to the UNEP's Resource Panel decisions should consider avoiding burden shifting in time, space and between environmental impacts². This would mean to consider the three attributes of the environment at the same time:

- Use of natural resources
- Using space (changing the spatial structure)
- Pollution, spreading of IAS, alien genotypes
- Consequently limiting environmental pressure includes:
 - Limiting the use of natural resources
 - Establishing and maintaining a coherent spatial structure of ecosystems
 - Preventing and controlling pollution, and preventing, controlling and eradicating IAS and alien genotypes to maintain healthy ecosystems
- (Environmental pressures are caused by socio-economic drivers:
 - Structural drivers (consumption and production patterns, with energy and material intensive products and services, urban structures, infrastructures, etc.
 - Institutional drivers (economic regulatory framework resulting in that natural resources are cheap in comparison to human labour, cheap fuel for transport, EU and state budgets, education system, etc.
 - Cultural drivers (loss of identity and traditional lifestyle, consumerism, the values of society, sectoral approach, analytical knowledge, etc.))

Comments on the achievements and shortcomings of the "Thematic Strategy on the Sustainable Use of Natural Resources"

- CEEweb welcomes the aim to develop a policy framework to reduce the environmental impacts of resource use in a growing economy through increasing eco-efficiency.
 - However, we would like to draw the political attention to the dangers of the rebound effect. The so-called rebound effect occurs when some of the savings from energy efficiency are cancelled out by changes in people's behaviour.
- CEEweb welcomes the intention to support the life cycle approach, avoiding that environmental impacts are shifted from one phase to another or to other countries.

¹ Iván Gyulai: Getting rid of energy dependence: http://www.mtvosz.hu/hirek_list.php?which=490&from=

² http://www.unep.org/resourcepanel/documents/pdf/PriorityProductsAndMaterials_Report_Full.pdf

- However, CEEweb disagree that growth and jobs are still in the focus
 - how can we grow in a finite system?
 - However, limiting resource use would contribute to achieve job-related goals, since it would bring opportunity for raise of human labour.
- according to the Preparatory study for the review of the thematic strategy on the sustainable use of natural resources made by BIO Intelligence Service³:
 - steps still have to be taken to reveal the impact of resource use on the environment at national level
 - According to CEEweb, applying holistic approach, institutional drivers that generate pressures on the environment could be tackled at the same time with addressing the cultural drivers also behind these pressures. Promoting examples, e.g. with less energy use less energy dependence⁴ the drivers would become more capably to be eliminated.
 - there is still a need to establish a common policy framework which is able to tackle waste management, lead to sustainable production and consumption patterns, and tackle resource use challenges
 - According to CEEweb, limitation of resource use can be a solution for it
 - regarding the development of national measures and programmes by Member States steps still need to be taken parallel to general awareness raising activities
 - According to CEEweb, there is absence of targets and concrete timelines, the insufficient definition of responsibilities and specificity of national conditions (social-economic, political and environmental factors). Rarely encouraging the development of new and innovative policies at EU and MSs level

Comments on Resource Efficient Flagship Initiative

- CEEweb welcomes that the Initiative, opposite to its successor, considers also ecosystems and their essential services: water, air, etc. besides raw materials. CEEweb also welcomes reducing our dependence on imports of increasingly scarce fuels and materials will enable Europe's economy to cope better with rising energy and commodity prices. Moreover, CEEweb welcomes the intent to stimulate greater innovation and innovatively transform our agricultural, industrial, energy and transport systems through delivering **structural change**.
 - According to CEEweb, long term system level change is required to shift from the current unsustainable ways to a safe operating system within safe ecological limits
- However, we disagree with that focus is still on maximizing economic output and competitiveness.
 - According to CEEweb, input into the economy has to be limited so that economy stays within safe ecological limits⁵ and would be more easily adapt to the changing environment.
 - Instead of competitiveness we would focus on cooperation and would start a debate on it.
- CEEweb welcomes **the shared vision** – the initiative seeks to involve and unite governments, stakeholders and the public in support of a long-term European vision for efficient use of resources.
 - But at the same time agrees with Resource Efficiency Alliance (REA) recommendations⁶ that an ambitious vision (by 2050 resource efficiency

³ http://ec.europa.eu/environment/natres/pdf/BIO_TSR_FinalReport_10112010_Executive%20Summary.pdf

⁴ Iván Gyulai: Getting rid of energy dependence: http://www.mtvsh.hu/hirek_list.php?which=490&from=

⁵ A safe operating space for humanity, Johan Rockström et al, *Nature* 461, 472-475 (24 September 2009)

⁶ Summary of Resource Efficiency Expert Workshop, 29 September 2010, Brussels

- should be increased by from four to ten times) has to be set which exact targets have to be in line with in order to establish a safe operating space for humanity.
- CEEweb welcomes the support of **knowledge base** and the finding of the already established International Panel on Sustainable Resource Management, however it agrees with REA recommendation on
 - support has to be raised for heterogeneous knowledge platform that are able to redefine human well-being, but additionally redefine competitiveness and development
 - CEEweb also agrees with FoE and SEBI regarding the need to develop proper **indicators** for resource use, however it thinks that
 - we already know enough to act now baring in mind precautionary principle: identify limits, absolute scarcities and prepare for worst scenarios.
 - parallel proper indicators should be developed that are easy to communicate towards decision-makers, towards the public as well as accessing the success of the initiative.
 - CEEweb welcomes considering that **taxes and subsidies** on the use of energy or other resources can be used both to steer behavior leading to reduced and more efficient consumption and to help restructure public finances away from labor taxation, which benefits job creation and economic growth;
 - In order to really achieve structural changes as well as avoid the rebound effect, limitation of the input into the economy is necessary.
 - A shift from human labor tax to resource use would derive automatically from the limitation of resource use.
 - CEEweb welcomes the initiative to develop **implementation guidance for MSs** and businesses and the cooperation with other DGs in order to reach more effective action thanks to the combined efforts of all these parties.
 - However, the quality of National Energy Efficiency Action Plans, developed by Member States since 2008, is disappointing, leaving vast potential untapped. The move towards renewable energy use and greater energy efficiency in transport is happening too slowly. While we are broadly on track for the 20% target for renewable, we are a long way from achieving the objective set for energy efficiency⁷. Therefore, according to CEEweb, real cooperation and commitment can be achieved only when ownership is created. This can be realized through
 - involving stakeholders at the earliest stage and develop sectoral sub-targets and national targets with them
 - emphasizing the role of resource efficiency in the national reform programmes being developed under the Europe 2020 Strategy.
 - disseminating already existing good examples and collecting new ones, e.g. the Hungarian Climate Bill proposal
 - CEEweb also welcomes the initiative on to **change our behavior as consumers and as producers** through market signals.
 - It would have tangible consequences, as the following example illustrates. Changing consumer demand led the global market for eco-labelled fish products to grow by over 50% between April 2008 and March 2009 attaining a retail value of 1.1 billion euro, providing economic rewards for sustainable fisheries management and marine bio-diversity preservation⁸.

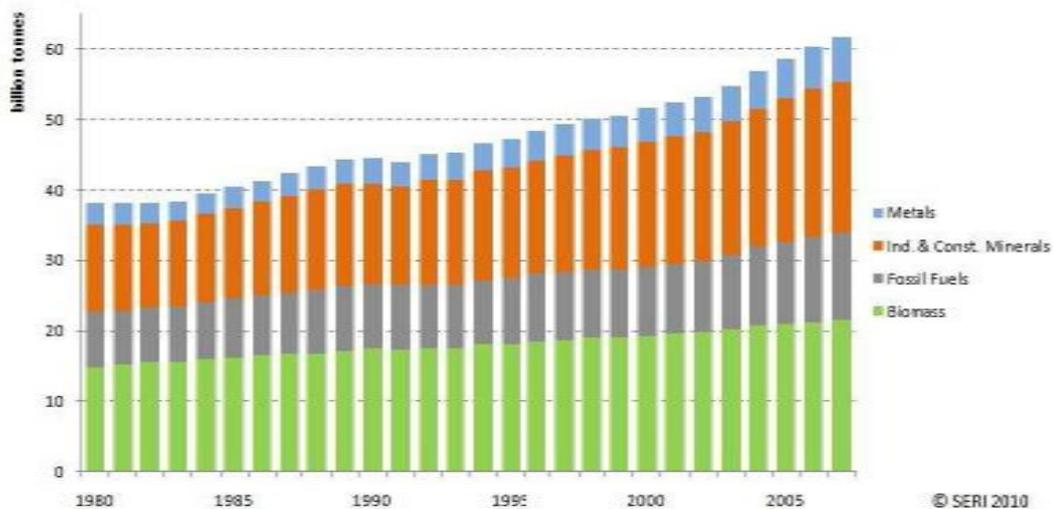
⁷ COM(2010) 639 final <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0639:FIN:EN:PDF>

⁸<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/43&format=HTML&aged=0&language=EN&guiLanguage=en>

- However, it would be still in question how to reach changing consumer demand. Through the limitation of resource use it will be automatically solved:
 - Due to limitation, natural resources would become scarce globally, which would have several positive social consequences besides environmental ones. Limiting resource use also means limiting the use of energy, which would put a pressure on transport and use of chemicals and thus intensive agricultural practices. This inevitably results in the “glocalisation” of the economy, where production and consumption is based much more on local resources. Consequently, people would start consume locally produced goods leading also to a greater appreciation for the true cost of our daily lives. It benefits local economies and poor, marginalised areas, which are now under great pressure within the globalised economy for their natural resources. Furthermore, limiting natural resources also increases the competitiveness of human labour, as labour intensive, but material and energy poor products and services become relatively cheaper on the market. This has a positive impact on employment, while also spur innovation for higher resource efficiency and recycling. Moreover, limiting the total environmental pressure and by that stopping further environmental degradation ensures the maintenance of ecosystem services, which is the basis of local livelihood.
 - According to CEEweb, limiting non-RES could avoid also the problem that many proposed sustainable technologies for energy supply and mobility rely for a large part on the **use of metals** (e.g. in batteries, fuel cells and solar cells). Metal refining usually is energy intensive.

Data related to resource use and its environmental impacts

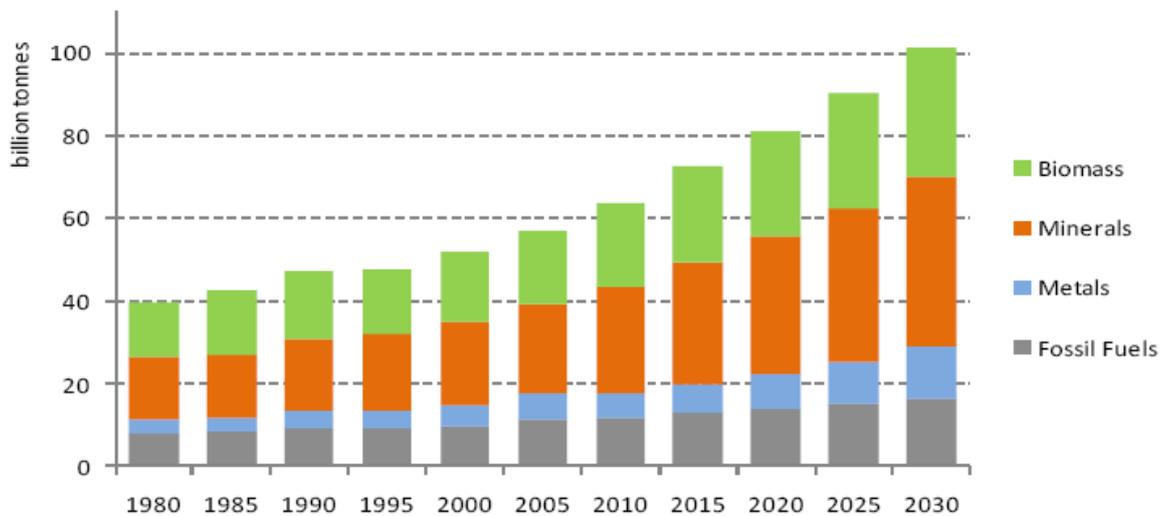
- Humanity’s Ecological Footprint has more than doubled since 1966. In 2007, the most recent year for which data are available, humanity used the equivalent of 1.5 planets to support its activities⁹.
- Material use in the EU-27 is growing slowly and at a similar space. Net import of material into the EU-27 amount to 1.3 billion tons and have increased by almost 26% in the period 2000 to 2007¹⁰.



⁹ <http://www.footprintnetwork.org/press/LPR2010.pdf>

¹⁰ Preparatory study for the review of the thematic strategy on the sustainable use of natural resources

Global used material extraction, 1980 - 2030



11

- Study “Resource use in Europe” produced by Germany’s Wuppertal for Climate, Environment and Energy Institute for European Environmental Agency in 2005 shows similar results. Namely, that EU countries are far away from decoupling the use of resources from the economic growth.¹² The EU’s material requirements increased almost as fast as the growth of its economy.
- Environmental impacts of consumption and production have been assessed by the UNEP’s Resource Panel¹³, according to which
 - Agriculture and food consumption are identified as one of the most important drivers of environmental pressures, especially habitat change, climate change, water use and toxic emissions. The Panel notes that some efficiency gains are possible in terms of reducing the impacts of agriculture. But adds that a 50 per cent growth in population by 2050 will overwhelm or offset these gains.
 - The use of fossil energy carriers for heating, transportation, metal refining and the production of manufactured goods is of comparable importance, causing the depletion of fossil energy resources, climate change, and a wide range of emissions-related impacts.
- However, no comprehensive impact coefficients per unit resource use have been developed and no quantitative time series data for environmental impacts exists, not even for specific impacts or in specific countries. Lack of systematic accounting for the environmental impacts within and beyond the EU.

Necessary financing for achieving sustainable operation of our economy

- According to the Stern Report¹⁴ (2007) only 1%- of the GDP should be spent on mitigating the effects of climate change.
- UNEP Green Economy Report¹⁵ says that investing two per cent of global GDP, equals \$ 1.3 trillion into ten key sectors can kick-start a transition towards a low carbon, resource efficient Green Economy.

¹¹ http://www.foeeurope.org/activities/waste_management/Resource_use_conference_writeup_1June10_final.pdf

¹² *Resource use in Europe*, Wuppertal for Climate, Stephan Moll et al, Environment and Energy Institute, December 2005, http://www.personal.ceu.hu/students/06/Lin_Jiaqiao/Research_Focus/papers/ecosystem%20mgmt_natural%20zy/resour ce%20use%20in%20the%20EU_wuppertal.pdf

¹³ http://www.unep.org/resourcepanel/documents/pdf/PriorityProductsAndMaterials_Report_Full.pdf

¹⁴ http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/stern_review_report.htm

¹⁵ <http://www.unep.org/greeneconomy/v2/GreenEconomyReport/tabid/29846/Default.aspx>

- In connection to resource efficiency the Report says that investing about one and a quarter per cent of global GDP each year in energy efficiency and renewable energies could cut global primary energy demand by nine per cent in 2020 and close to 40 per cent by 2050. This would also lead to the following social and economic development:
 - Employment levels in the energy sector would be one-fifth higher than under a business as usual scenario as renewable energies take close to 30 per cent of the share of primary global energy demand by mid century.
 - Savings on capital and fuel costs in power generation would under a Green Economy scenario, be on average \$760 billion a year between 2010 and 2050.
- The Report emphasizes the role of innovative and imaginative public policies, such as sound regulatory frameworks, a prioritizing of government spending and procurement in areas that stimulate green economic sectors and limits on spending that deplete natural capital.
- On the way to green economy, \$134 billion out of the 1.3 \$ trillion could be spent in greening the building sector by improving energy efficiency.
- With the right government policies, energy savings of around one-third could be achieved worldwide in the building sector by 2050 for an annual investment of \$300 billion to one trillion dollars.
- Energy efficiency is the most cost effective way to reduce emissions, improve energy security and competitiveness, make energy consumption more affordable for consumers as well as create employment, including in export industries. Above all, it provides tangible benefits to citizens: average energy savings for a household can amount to € 1 000 per year.
- **European countries spend 1%- of their GDP** to financing energy supplies among which most of them increase CO2 emissions, since they inspire the consumption of fossil fuels or decrease energy efficiency. 16% of EU GDP, around € 1,500 billion, is spent by public authorities. Public procurement should support resource efficiency.

