



CEEweb for Biodiversity
Széher út 40. 1021 Budapest, Hungary
Phone: +36 1 398 0135
Fax: +36 1 398 0136
ceeweb@ceeweb.org
www.ceeweb.org

Will efforts for a resource efficient Europe deliver results without considering the need for limiting its resource use?

Assessment of CEEweb for Biodiversity on the Roadmap to a Resource Efficient Europe

General background

CEEweb for Biodiversity¹ has been advocating for resource use policies that can make a real contribution to a sustainable society, where biodiversity and ecosystem services are maintained as a basis for social and economic processes, and social justice is realised.

Realising the role of resource use as a growing pressure on biodiversity, CEEweb, together with its partners, ANPED and Ecologistas en Acción initiated the Resource Cap Coalition (RCC) in November 2010. Since then more than thirty NGOs and research institutes mainly from Europe joined the RCC calling for an absolute resource cap, which we suggested as a basis for future EU resource policies.

We welcome the aspirations of the Roadmap to a Resource Efficient Europe² as one of the key pillars of Europe 2020 Strategy, willing to realize a *'positive vision of the world we and our children would like to live in 2050'* and aiming to lead to *'fundamental transformation'*. However, we are concerned that the Roadmap cannot achieve many of the aims of the Resource Efficiency Flagship Initiative (REFI), and it cannot deliver many milestones of the Roadmap either with the approach and the identified actions. Therefore, in our view the vision of the Roadmap for 2050 won't be achieved without tackling the rebound effect and seriously considering the need for absolute resource use reduction.

Challenges

Resources provided the basis for our boosted production and consumption. The extraction of these materials rose to a level where it is needed to search for new alternatives and replacements, and there are growing concerns about resource scarcity on global level. According to the Resource Efficiency Roadmap *by 2050 we will need, on aggregate, the equivalent of more than two planets to sustain us*. But our unsustainable habits trigger economic and environmental problems already today, even if there is a positive and more or less spontaneous trend of *'dematerialization'* of the economy, effectively raising resource productivity by about 1–2% annually on the global level – though these improvements are mainly apparent in industrialised countries (UNEP's International Resource Panel).

¹ CEEweb for Biodiversity is an umbrella organization of nature conservation NGOs from the Central and Eastern European region. Our mission is the conservation of biodiversity through the promotion of sustainable development.

² COM(2011) 571

Besides, this overconsumption does not ensure the fair and equitable sharing of resources on national and global levels, thus they do not contribute to poverty and hunger alleviation either. Hence growing resource constraints will not affect everyone equally. The poorest people in the world will be deprived of opportunities to develop and meet their basic needs, even if they consume little of most materials. Therefore, we need radical changes and are forced to reduce resource use in absolute term on global level and ensure the equitable sharing at the same time.

These challenges are also recognized by UNEP's International Resource Panel in its Report on Decoupling Natural Resource Use and Environmental Impacts from Economic Growth³. It states inter alia that:

- *to make the transition to a more sustainable global economy, sustainable resource management strategies will be required that promote resource and impact decoupling, with an emphasis on absolute resource use reductions in developed economies and relative decoupling in developing economies (up to a certain point after which they must also shift into an absolute reduction mode).*
- *this decoupling will require significant changes in government policies, corporate behaviour and consumption patterns by the public.*

As it is identified in the Resource Efficiency Flagship Initiative (REFI), Europe needs to move towards a more resource efficient economy, also as a means *to protect valuable ecological assets, the services they provide and the quality of life for present and future generations*. It says that *it is necessary to find new ways to reduce inputs, change consumption patterns, and optimize business methods, as well as a significant transition in energy, industrial, agricultural and transport systems*.

CEEweb's analysis of the Roadmap

The ambitions mentioned above and the vision of the Roadmap are undermined by the approach taken and the actions identified. The Roadmap is seen as a way to increase competitiveness, profitability and reduce costs, while boosting growth and jobs. Without setting absolute limits to resource use, these impacts can lead to even higher resource consumption. This phenomenon is the rebound effect, which can be observed in the case of below cost efficiency increase (when the efficiency increase reduces total costs of production or use). This can include direct rebound effect (when the consumer uses more resources because overall it has become cheaper), indirect rebound effect (when the savings from reduced resource costs are invested in other forms of consumption – also resulting in increased resource use) and macroeconomic rebound due to more rapid economic growth because of the increasing efficiency of the economy. As growing evidence suggests⁴ rebound is most significant through indirect and macroeconomic mechanisms on national and global scale - which typically cannot be tackled through any of the tools suggested in the Roadmap.

Even though the Roadmap mentions that the *"rebound effect" must be anticipated, and accounted for, in developing policy and setting targets*, unfortunately it lacks any tools to realize this, while the overall growth agenda is opposite to this aim.

In conclusion only tools that ensure absolute resource use reduction can substantially increase resource security and independence, as well as meet the EU's environmental objectives on fighting against climate change and limiting the environmental impacts of resource use, which underpin all economic activities in the long term. This shall also underpin the EU's efforts to improve the wellbeing of its citizens and contribute to stop global biodiversity loss through reducing its harmful impact on the rest of the world. In addition integrated resource policy tools shall also strengthen

³ http://www.unep.org/resourcepanel/decoupling/files/pdf/decoupling_report_english.pdf

⁴ Energy emergence - rebound & backfire as emergent phenomena, A review of literature, J. Jenkins et al, Breakthrough Institute, 2011

social justice and support growth in employment. Therefore, progress and success need to be redefined in the Roadmap, integrating environmental, social and economic considerations.

CEEweb's recommendation for a policy tool to reduce resource use in absolute terms and support social objectives at the same time

In order to deliver the milestones in the Roadmap and achieve environmental and social goals at the same time, an integrated policy tool to address resource use needs be developed and implemented. This tool should aim to transform the production and consumption patterns, reduce resource use on national level, decrease energy dependence, create a market for environmentally friendly products and services, and rebalance the use of human labour and machines, while taking into account and eventually reducing social inequalities in resource use. The integrated policy tool needs to harmonise these different objectives, and all sectors need to be involved in the development from the beginning to create ownership.

In order to meet these requirements and milestones of the Roadmap at the same time, CEEweb recommends introducing an Energy Quota Scheme⁵ as a first step towards a sustainable society. This integrated policy tool involves four pillars, and focuses on non-renewable energy use to transform production and consumption patterns horizontally in the economy.

- Pillar 1: The Energy Quota

The use of non-renewable energy sources shall be reduced through direct savings, increasing efficiency, or shifting to renewable energy sources. An effective tool for realizing this reduction is the energy quota system. Energy consumption entitlements of annually decreasing quantities would be allocated among the individual consumers and public and private consumer groups. Those, who save a part of their allocated entitlements, can sell their remaining entitlements through the quota managing organization to those who have consumed more than their allocated consumption entitlement. The quota managing organization sells the quota in the national currency, and buys the remaining quota for 'quota money'.

- Pillar 2: The Market for Environmental Goods and Services

The market for environmental goods and services is an open market operating according to environmental and ethical rules including aspects of sustainability and market considerations. The quota money received from selling energy consumption entitlements could be exchanged to products in this 'eco-labelled' secondary market.

- Pillar 3: The Revolving Fund

The Revolving Fund provides the opportunity for everyone, both energy producers and consumers, to be able to achieve savings through energy efficiency and renewable energy investments. The Revolving Fund provides interest free loan in quota money with a payback period adjusted to the energy savings or income generation realised through the investment.

- Pillar +1: Support Service

The Support Service aims to provide advice on lifestyle, planning, social and environmental issues, as well as information on the functioning of the scheme to consumers.

⁵ http://www.ceeweb.org/workingareas/resource_use/energyquota.htm

Detailed comments on the Roadmap

Measuring progress

The provisional lead indicator - "Resource Productivity" – will not give a real feedback to the public and decision makers about progress towards the vision. It is important to stress that resource productivity has been continuously increasing in Europe due to market mechanisms in the last decades, while the pressure on biodiversity and ecosystem services is growing at the same time. This latter trend is bringing us further away from the vision of the Roadmap, and unfortunately the selected lead indicator will mask real progress or the lack thereof.

Complementary indicators on key natural resources such as water, land, materials and carbon can have important role in providing feedback though. They must give accurate picture of the absolute consumption of these resources by the European economies within the EU and globally. However, the list of these indicators should be extended, importantly with an indicator on total primary energy use.

At the same time we stress that even before the full elaboration of the indicators, actions must be made without delay based on the current knowledge on environmental degradation and considering the precautionary principle.

Sustainable consumption and production

Milestone: By 2020, citizens and public authorities have the right incentives to choose the most resource efficient products and services, through appropriate price signals and clear environmental information. Their purchasing choices will stimulate companies to innovate and to supply more resource efficient goods and services. Minimum environmental performance standards are set to remove the least resource efficient and most polluting products from the market. Consumer demand is high for more sustainable products and services.

Milestone: By 2020, market and policy incentives that reward business investments in efficiency are in place. These incentives have stimulated new innovations in resource efficient production methods that are widely used. All companies, and their investors, can measure and benchmark their lifecycle resource efficiency. Economic growth and wellbeing is decoupled from resource inputs and come primarily from increases in the value of products and associated services.

How much the actions identified in the Roadmap can make progress towards the milestones	How much an integrated resource policy tool suggested by CEEweb could make progress towards the milestones
<ul style="list-style-type: none"> - the identified actions will contribute to increasing resource efficiency, but it would most likely fall much below the required innovation and changes - no actions are identified to overcome the mentioned rebound effect - clear information and incentives can contribute to right choices of consumers, however, without addressing the values of people and the concepts of development and wellbeing, substantial voluntary changes on overall consumption level are unlikely - making the right choices by both consumers and producers greatly depends on their financial 	<ul style="list-style-type: none"> - the rebound effect is tackled through putting an overall cap with the non-renewable quota scheme for non-renewable energy, which can be extended to other resources at a later stage as needed - the consumers and producers receive continuous feedback on their choices related to non-renewable energy directly and they are stimulated to reduce their consumption year by year, which helps changing their values - the secondary market provides clear information about the environmental and social aspects of the certified products and services, and gives

possibilities, which is not addressed by the actions	benchmarking for the involved businesses - the revolving fund creates financial sources to realise resource efficiency investments even for marginalised consumers and producers
--	---

Turning waste into resource

By 2020, waste is managed as a resource. Waste generated per capita is in absolute decline. Recycling and re-use of waste are economically attractive options for public and private actors due to widespread separate collection and the development of functional markets for secondary raw materials. More materials, including materials having a significant impact on the environment and critical raw materials, are recycled. Waste legislation is fully implemented. Illegal shipments of waste have been eradicated. Energy recovery is limited to non recyclable materials, landfilling is virtually eliminated and high quality recycling is ensured.

How much the actions identified in the Roadmap can make progress towards the milestones	How much an integrated resource policy tool suggested by CEEweb could make progress towards the milestones
- The milestone seems overly ambitious in light of the applied actions and the end-of pipe approach. Without considering the growing input to the economy, effectively regulating the output (waste) seems unrealistic.	- Regulating and reducing the input to the economy through a quota scheme can make a substantial contribution to reducing the output (waste), which shall provide a framework for the specific actions identified in the Roadmap.

Supporting research and innovation

By 2020, scientific breakthroughs and sustained innovation efforts have dramatically improved how we understand, manage, reduce the use, reuse, recycle, substitute and safeguard and value resources. This has been made possible by substantial increases in investment, coherence in addressing the societal challenge of resource efficiency, climate change and resilience, and in gains from smart specialization and cooperation within the European research area.

While improved knowledge is necessary related to resource use, it is important to make actions already now based on the precautionary principle and the scientific data already available, e.g. in the report compiled by UNEP's International Resource Panel. In its decoupling report the Panel advocates for the necessity of the tough contraction and convergence in resource use.

How much the actions identified in the Roadmap can make progress towards the milestones	How much an integrated resource policy tool suggested by CEEweb could make progress towards the milestones
- good actions, but likely with limited impact, especially in the time of economic crises with shrinking financial resources	- The resource cap provides the strongest incentive for the private sector to invest into innovation - the revolving fund provides the necessary capital to realise the efficiency improvement investments, while it also creates demand for new technologies

--	--

Environmentally harmful subsidies and getting the prices right

<p><i>Milestone: By 2020 EHS will be phased out, with due regard to the impact on people in need.</i></p> <p><i>Milestone: By 2020 a major shift from taxation of labour towards environmental taxation, including through regular adjustments in real rates, will lead to a substantial increase in the share of environmental taxes in public revenues, in line with the best practice of Member States.</i></p>
--

Elimination of EHS is an extremely important issue, since the current unsustainable production and consumption patterns are based on supporting resource intensive practices, which poses a huge pressure on the environment. Efforts on eliminating EHS, however, are useless without taking into account social considerations and without tackling opposing economic interest, which makes elimination even far more problematic.

Therefore, elimination of environmentally harmful subsidies shall be realized through integrated financial mechanisms. Fiscal transfers from the environmentally and socially harmful activities to environmentally and socially beneficial activities can help transforming the economy towards sustainability and at the same time prevent the generation of further problems. Such a mechanism shall ensure that environmental and social targets are achieved with the active involvement of all sectors and actors, and if these targets are achieved, the financial mechanism ceases to exist.

How much the actions identified in the Roadmap can make progress towards the milestones	How much an integrated resource policy tool suggested by CEEweb could make progress towards the milestones
<ul style="list-style-type: none"> - If the elimination of EHS is not linked to providing opportunities to gain competitive advantages by the affected businesses, it creates strong opposite interests and hinders implementation - While the direction for such a tax reform and eliminating EHS is good, it is doubtful if they can effectively transform production and consumption patterns, while taking into account social considerations as well. The poor and marginalised groups (who pay relatively low income tax already today), would be hit the most, which limits the potential of these tools in reducing resource consumption. It also does not help increasing equity in resource use among the rich and poor, but is expected to further widen the gap. 	<ul style="list-style-type: none"> - The proposed energy quota scheme provides the necessary integrated financial mechanism - The secondary market of certified products and services provides competitive advantages to the involved businesses, as there is extra demand for these products of services through the spending of the quota money by the consumers in this market. This reduces the negative effect of the elimination of EHS. - The Revolving Fund helps businesses to transform their production practices and save costs even if EHS are eliminated. - The Revolving Fund and the secondary market reduces economic opposition for eliminating EHS and introducing the quota scheme through creating opportunity for investments and growth in environmentally and socially sound businesses. - The proposed Energy Quota Scheme would logically imply the shift of taxation from human labour towards resource use. Namely, if resource use is limited, resource intensive practices (generally with low human labour input) become less competitive.

	This results in their gradual replacement by products and services with lower resource demand and higher human labour involved. This would in general result in higher employment rate and the possibility to decrease income taxation.
--	---

Natural capital and ecosystem services

<p><i>Milestone: By 2020 natural capital and ecosystem services will be properly valued and accounted for by public authorities and businesses.</i></p> <p><i>Milestone: By 2020 the loss of biodiversity in the EU and the degradation of ecosystem services will be halted and, as far as feasible, biodiversity will be restored.</i></p>
--

Biodiversity loss and ecosystem degradation can be only halted, if the total environmental pressure (from resource use, use of space and pollution, alien genotypes) on biodiversity is reduced. This requires holistic approach and integrated policy tools. However, both the 2020 EU Biodiversity Strategy⁶ and this Roadmap lack such policy tools.

The economic value of ecosystem services should be always used together with other information in decision making (also considering the intrinsic value of species), taking into account the uncertainties and issues of irreversibility and resilience. Moreover, sustainability assessment shall be carried out for each innovative financial mechanism, and sufficient safeguards shall be integrated for those, which contribute to sustainability and thus shall be introduced (e.g. to prevent the shifting of environmental pressures).

How much the actions identified in the Roadmap can make progress towards the milestones	How much an integrated resource policy tool suggested by CEEweb could make progress towards the milestones
<ul style="list-style-type: none"> - Market based instruments can play an important role in regulating resource and land use, if it is ensured that the total environmental pressure is reduced in absolute terms and all issues are taken into account. However, from the identified actions, this seems to be doubtful. - The identified actions can provide some incentives to better integrate ecosystems and biodiversity into decision making, but their impact is likely to be limited falling behind the milestones. - Significantly strengthening efforts for biodiversity integration is not possible without introducing integrated policy tools on resource and land use, as past efforts have shown. 	<ul style="list-style-type: none"> - The reduction of environmental pressure from resource use on biodiversity is greatly ensured by the non-renewable quota system - Environmental pressures on biodiversity are also reduced through transforming production and consumption patterns with the help of the secondary market and revolving fund - However, in order to deliver the milestones, the integrated resource tool shall be complemented with integrated land use tool as well.

⁶ COM(2011) 244 final

By 2020, all WFD River Basin Management Plans (RBMPs) have long been implemented. Good status – quality, quantity and use - of waters was attained in all EU river basins in 2015. The impacts of droughts and floods are minimised, with adapted crops, increased water retention in soils and efficient irrigation. Alternative water supply options are only relied upon when all cheaper savings opportunities are taken. Water abstraction should stay below 20% of available renewable water resources.

By 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally, and the rate of land take is on track with an aim to achieve no net land take by 2050; soil erosion is reduced and the soil organic matter increased, with remedial work on contaminated sites well underway.

In order to ensure the good quality of waters by 2015, land use practices in the river basins (e.g. the use of fertilizers) shall be also addressed. Unfortunately current resource policies (resulting in EHSs) lead to the trend of landscape polarisation (intensification on one hand and land abandonment (i.e. giving up extensively used, often biodiversity rich areas) on the other). Thus integrated resource and land use policies shall be applied at the same time.

Integrated land use policies shall cover all land use types and all land users into one scheme in order to prevent the shifting of environmental pressure. Such an integrated policy tool aiming to a shift towards sustainable resource use patterns in the whole area of the EU should be put in place immediately. Urgent action is needed in this field especially considering the already small ratio of natural habitats (e.g. about 15-17% in Visegrád countries) and the even smaller fraction of natural habitats in a natural state (e.g. 0.6% in Hungary). This shall also contribute to efforts to limit, mitigate or compensate soil sealing.

How much the actions identified in the Roadmap can make progress towards the milestones	How much an integrated resource policy tool suggested by CEEweb could make progress towards the milestones
<ul style="list-style-type: none"> - Achieving the good status of waters seems doubtful with the identified actions (e.g. because of challenges of phasing out EHS), even if they provide incentives for making progress. - Integrating land use into decision making is an important action, but the Roadmap does not provide the proper tools for this. Among others the scope of the SEAs shall be extended in order to cover all relevant decision making processes, including budgetary decisions and sectoral strategies. 	<ul style="list-style-type: none"> - The non-renewable energy quota scheme can contribute to better land use practices (e.g. through reversing the current trend of landscape polarisation), which can indirectly contribute to better water quality. - In order to be effective, the integrated resource tool shall be complemented with integrated land use tool as well.

Addressing food

Milestone: By 2020, incentives to healthier and more sustainable food production and consumption will be widespread and will have driven a 20% reduction in the food chain's resource inputs. Disposal of edible food waste should have been halved in the EU.

How much the actions identified in the Roadmap can make progress towards the	How much an integrated resource policy tool suggested by CEEweb could make progress
--	---

milestones	towards the milestones
- It is not clear how the assessments and methodology identified in the Roadmap will ensure the spreading of incentives to more sustainable food production in whole agricultural sector, even if they can make a limited contribution.	Integrated land and resource use policy tools aiming at sustainable land use and reducing overall resource use would substantially reduce the resource input to agriculture and shift it towards sustainability.

Improving buildings

Milestone: By 2020 the renovation and construction of buildings and infrastructure will be made to high resource efficiency levels. The Life-cycle approach will be widely applied; all new buildings will be nearly zero-energy²¹ and highly material efficient, and policies for renovating the existing building stock will be in place²² so that it is cost-efficiently refurbished at a rate of 2% per year. 70% of non-hazardous construction and demolition waste will be recycled.

How much the actions identified in the Roadmap can make progress towards the milestones	How much an integrated resource policy tool suggested by CEEweb could make progress towards the milestones
- It is not clear what measures will be implemented to stimulate demand e.g. through suitable financing mechanisms. Thus it is a question much they are appropriate to achieve the milestone.	- The revolving fund provide suitable financing mechanism for resource efficiency investments, which is accessible to all consumers and producers as it can be realised from energy savings (in quota money) . - The secondary market stimulates demand for resource efficient products and services also in the housing sector.

Governance

Milestone: By 2020 resource efficiency will be a shared objective of the international community, and progress will have been made towards it based on the approaches agreed in Rio.

Resource efficiency itself does not say anything about the absolute level of resource use, the international resource flow and environmental and social justice in the global context, which should be the core issues of international negotiations about resource use. At the same time resource efficiency is continuously improving on global level.

Thus international negotiations shall incorporate issues of absolute resource demand and global equity, and the global agreement on future policies shall eliminate the ecological debt of the North to the South.

How much the actions identified in the Roadmap can make progress towards the milestones	How much an integrated resource policy tool suggested by CEEweb could make progress towards the milestones
- The identified actions can help achieving the set milestone, even if it does not make a real contribution to sustainability and equity on global level.	- Applying resource use quota schemes on global scale provides opportunities for ensuring economic, environmental and social justice between developed and developing countries.

	<ul style="list-style-type: none">- An international revolving fund could provide the necessary financing for developing countries to improve their efficiency.- An international secondary market would provide opportunities for farmers and producers from developing countries to access a market with a high demand, where EHS do not put them at competitive disadvantage. At the same time the secondary market shall also require the same level of environmental and social standards globally.
--	---

For further information please contact:

- Klára Hajdu, General Secretary, CEEweb for Biodiversity, hajdu@ceeweb.org, + 36 1 398 0135
- Veronika Kiss, Programme Coordinator, CEEweb for Biodiversity, kiss@ceeweb.org, + 36 1 398 0135

CEEweb for Biodiversity is a network of non-governmental organizations in the Central and Eastern European region. Our mission is the conservation of biodiversity through the promotion of sustainable development.