

Presidency's Summary of the Informal Environment Council on Sustainable Materials Management, 12th and 13th July 2010

- The Environment ministers from the EU Member States, candidate countries, EFTA-EEA countries, representatives of the European Parliament and the Commission, the European Environment Agency, the European Environmental Bureau, the Federation of Belgian Enterprises and the Wuppertal Institute discussed issues related to Sustainable Materials Management (SMM) at an informal ministerial meeting held on 12-13 July 2010 in Ghent, Belgium.
- The Presidency wishes to summarize the debate as follows:

Sustainable Materials Management and resource efficiency

- SMM is an integrated policy approach that seeks to reduce environmental impacts of materials use and conserve natural resources throughout the life-cycle. A material is considered to be any physical substance or object that is mined, harvested, processed, produced, distributed, used, consumed, discarded or recovered. It can be anything from a raw material, a finished product to a waste, as long as it is part of some form of economic cycle, in a specific phase of its life-cycle.
- SMM is closely linked to the flagship initiative on resource efficiency included in the EU2020 Strategy. This strategy aims at the delivery of smart, sustainable and inclusive growth and stresses the need for a resource efficient Europe in which economic growth is decoupled from the use of resources. Resource efficiency implies using natural resources as efficiently and as environmentally responsible as possible. If we do not handle the materials that we are using day by day in a sustainable way, we will never succeed in obtaining a resource efficient society. In other words, SMM is a prerequisite for more resource efficiency.

Need for Sustainable Materials Management

- The footprint of the EU-27 is more than twice its regenerative capacity. The current pattern of production and consumption and the related materials use in Europe endangers the availability of the natural resources and the security of supply. Therefore, Europe urgently needs to manage materials more sustainably and work towards an absolute decoupling of environmental impact from rise in wealth.
- There is a growing problem of water scarcity in Europe, due to higher pressure on land use (inter alia due to production of biofuels) and less open surface for water penetration.
- The European Commission and the Member States should therefore move towards the development of a strong SMM policy at the EU level. It should be an overarching goal in the 7th Environmental Action Programme. Through an absolute decoupling of economic growth from the environmental impacts of materials, we will contribute to mitigating climate change, halting biodiversity loss, preventing pollution and protecting human health. An efficient use of materials has a beneficial effect on, for instance, energy and land use requirements.
- Moreover, SMM is an engine for sustainable growth. It creates jobs, boosts competitiveness, fosters innovation and reduces Europe's dependence on primary resources.

Possible ways forward to promote SMM

Integration: from fragmented policies to integrated approaches

From end-of-the-pipe to life-cycle approach

- The EU already addresses many of the environmental challenges related to materials use. In particular, extensive legislation has been put in place to manage European waste more sustainably. Given the wide diversity of waste management practices throughout Europe, there is still a large potential for further strengthening and better implementation of existing EU waste policies such as the landfill directive, the introduction of separate collection schemes for higher quality recycling and pay-as-you-throw schemes. There should be more and better controls on shipments of waste into, through and out of Europe. However, a policy that is limited to waste

prevention and recycling is insufficient to significantly reduce Europe's environmental impact and to avoid a further depletion of global natural capital.

- Therefore, the EU and the Member States have to make the shift from waste to comprehensive material policies. We need to manage complete material chains from the extraction or harvesting of resources, over production, distribution and consumption, to recycling and final treatment. SMM elevates the focus of governments, industry and consumers from individual material, product or processes, to the entire system of material flows and associated life-cycle impacts. Understanding impacts along the chain is necessary in order to set the right priorities, to target policy measures so that they can be beneficial for the environment as well as cost-efficient and to avoid burden-shifting between generations, between geographical regions, within material chains and between sectors.
- A major challenge consists in reconciling requirements of energy efficiency and material efficiency and in optimising the choices on material use in this respect. In general, more attention should be paid to the question whether we are using materials for the right purpose in their most efficient way, taking into account life-cycle aspects and possibilities for substitution. For instance, it was raised that the production of biomass should primarily be used for food purposes and only in a second instance for energy purposes.
- The design of products is one of the key elements in closing the loop and in obtaining products that exert a minimal environmental and health impact across all stages of the life cycle, taking into account also hidden impacts. Product legislation should pay more attention to these design aspects when laying down standards (such as energy, water or material efficiency standards, maximum concentrations or sustainability criteria). The review of the EU Ecodesign Directive in 2012 must form the basis for a comprehensive European policy on ecological design, covering the resource intensive products, taking into account all relevant environmental criteria across the life-cycle and life-cycle resource requirements (material, water, energy and land). For instance, more attention should be paid to the reusability or recyclability of products.
- Businesses should make efforts to introduce life-cycle thinking in their business models. In this respect, extended producer responsibility schemes should be further stimulated and deepened, for instance by introducing product/service combinations or leasing concepts.

Towards coherent measures for creating a fair and strong recycling market

- A mix of instruments has to be deployed: a combination of regulatory instruments, taxes and market-based instruments, green public procurement, voluntary instruments, a strategic research agenda fostering not only technological innovations but also innovative business and consumption models and new forms of governance, resource efficiency and sustainability targets and monitoring instruments.
- Both the EU and the Member States should explore possibilities for the introduction of new market-based instruments such as tradable recycling certificates for stimulating design for recycling, separate collection of recyclable materials and the use of recycled materials on a national, European or even worldwide scale. These certificates can also be used as a means for rewarding CO₂-savings by better recycling so as to create a more level playing field with other treatment options aimed at the production of energy. With this more integrated approach we can better guarantee that the best environmental option from a life-cycle perspective is actually chosen.
- Other approaches are
 - the creation of a demand for recycled materials, via appropriate requirements on recycled content for certain product categories or via green public procurement.
 - the internalisation of environmental costs both on a national or European level. This can be done, for instance, via the introduction of landfill taxes and pay-as-you-throw-schemes or realizing a shift from labour to resource taxation, or other taxation forms that better reflect the environmental impact of products so as to promote resource efficiency. The Commission could facilitate more cooperation between Member States that want to realize this shift and avoid market distortions due to different taxation regimes.
 - removing environmentally harmful subsidies.
- The EU should explore the possibilities of contributing to the development of international certification schemes that guarantee a minimum treatment level of the waste received.
- The European Commission and the Member States should ensure that consumers (citizens, businesses and public authorities) receive correct information on the environmental impact of their consumption and of the products they buy, and on the way they discard their waste, in order to

raise awareness, highlight the need for a change in procurement practices and consumption behaviour and empower consumers to make sustainable choices. Ecolabeling based on an integrated approach giving attention to all life-cycle environmental impacts, can be an important instrument for achieving this.

- Common standards for end of waste and recycled materials may also help in creating better markets.
- The Member States should also invest in “green” skills, e.g. via education programs, including public communication campaigns, that have more attention for ecodesign and resource efficiency in general, or via promoting repair jobs.

More collaboration between different policy domains

- EU policy makers in different policy fields - such as environment, energy, agriculture, transport, industry, climate, innovation, finance and trade - should cooperate more intensively to develop a resource efficiency policy. Discussion on the challenges related to materials and resources use should not remain limited to the Environment Council. SMM should be an integral part of the core debate about the future of the European economy and society, in particular in the framework of the EU2020 Strategy. The European Council should be encouraged to address SMM and resource efficiency in continued and close coordination with other Council formations.
- In view of promoting an integrated, life-cycle approach, the European Commission is encouraged to prepare a coherent resource efficiency strategy based on the concept of SMM, and integrating existing policy instruments, in particular the EU Thematic Strategy on the sustainable use of natural resources, the EU Thematic Strategy on waste prevention and recycling, the EU Action Plan on sustainable consumption and production and the Raw Materials Initiative. The establishment of a Roadmap on Resource Efficiency by end 2011 would contribute to structure the further work and to maintain the momentum.
- Giving a substantial place to resource efficiency in the integrated guidelines of the EU2020 strategy and the National Reform Programmes will enhance the involvement of Member States.
- The European Commission and Member States are invited to assess existing and new policies and legislation for their impact on materials use and related life-cycle environmental impacts, and for their impact on the availability of both primary resources and secondary materials.
- In particular, the EU should develop a common approach with the aim of lowering the global impact of biotic material flows (such as for food) as these represent a high environmental impact and are circulating on a large scale in Europe and beyond. There is also more coherence and consistency needed between environment, trade and agricultural policies. New legislative proposals, such as a bio-waste directive, may also help to make different policy measures more coherent and consistent and reinforce a life cycle approach in this field.

Innovation: from incremental technological innovation to fundamental systems innovation

- In addition to technological innovation, genuine systems innovation is required to achieve SMM. New business models, sustainable trade models, new management and marketing techniques, new consumption models based not only on more efficiency but also sufficiency, a focus on functions or services that products fulfil, industrial symbiosis and other innovative ways of cooperation between actors in a material chain and between policy makers, industry and consumers need to be developed.
- The European Commission should identify resource efficiency as a ‘grand societal challenge’ within the Communication on the European Innovation Union that aims to reorient R&D innovation policies by addressing the innovation chain in an integrated way. This can be done by identifying resource efficiency as a priority domain in the EU innovation action plan, in particular addressing system transition challenges.
- Existing EU financial instruments, such as the cohesion policy, common agricultural policy and the R&D Framework Programme, should be oriented towards support for systems innovation, support for front runners and promotion of more collaboration between different actors in a life-cycle. In the forthcoming financial perspectives for 2013-2020 appropriate means should be provided.
- European methodologies for data gathering on material flows should be useful for monitoring the state of the environment or the performance of recycling schemes, but also for understanding the way our industrial metabolism works, for identifying waste or byproducts that can be used as a raw material in other production processes and for making inventories for life-cycle analyses. Such inventories should include the information on environmental impacts (both positive and negative)

of the use of products in order to provide the society and decision makers with as complete information as possible. Data collection methodologies might need to be amended. The EEA could play a role here.

Vision: from short-term policy and basic indicators to long-term strategic goals and comprehensive indicators for SMM

A European multi-stakeholder transition platform

- EU policy makers - in consultation with stakeholders - need to focus on long-term strategic objectives for SMM.
- This can be realized by a European transition platform. This platform would allow for a structured dialogue on how to achieve sustainability gains along the life-cycle of materials. This multi-stakeholder platform consisting of front runners could develop a challenging joint future vision on SMM, identify transition pathways resulting in a resource efficiency roadmap, contribute to cooperation and mutual learning among stakeholders, and launch experiments and demonstration projects which go beyond established practices and contribute to the envisioned systems changes. It could also foster more collaboration between different actors along the complete material cycle.

Better targets and indicators

- After having determined the strategic long term qualitative objectives, EU policy makers should establish quantifiable short and long term targets for SMM. Similar to the target for energy efficiency, a target for increased resource efficiency should be established. In addition to introducing a target for resource efficiency, targets setting sustainability limits for resources and materials use are of particular importance. Genuine sustainability targets should take into account the rebound effect.
- In order to monitor our progress towards SMM, the European Commission is invited to develop a robust set of indicators on European materials use and associated impacts (in the EU as a whole, in the Member States as well as in other regions). Adequate indicators are based on a life-cycle perspective and take into account burden shifting to other regions or between resources. The indicators should show the relative impact of European production and consumption patterns on the limited amount of natural resources that are available on this planet. The costs and benefits of SMM should also be carefully evaluated.
- The EU and Member States should continue their reflection on how to complement GDP with environmental accounts and social indicators.