Packaging Recovery Organisation Europe

PRO EUROPE

POSITION PAPER

Contribution of Packaging Recycling and Optimisation to reducing Climate Change

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IN BRIEF

Packaging recycling has led to positive environmental effects, including savings of energy and other natural resources as well as greenhouse gas emissions. This contribution to EU climate and energy targets is often underestimated.

The aim of this paper is to outline how PRO EUROPE and its members participate to these efforts through:

- *Bringing the principle of producer responsibility to life,* ***allowing waste materials to be increasingly recycled and recovered***
- ***Supporting industry in the process of eco-designing packaging****, allowing fewer materials and energy to be used in the production and the end-of-life management of packaging*

Recycling is acknowledged as being at the heart of sustainable waste management and resource efficiency but its significant contribution to reducing greenhouse gas emissions still needs to be recognised.

The climate change challenge

The Intergovernmental Panel on Climate Change (IPCCC) has observed that "warming of the climate system is unequivocal". This phenomenon has been linked to the emission and accumulation of greenhouse gas (GHG) emissions in our atmosphere.

The environmental, public health, social, and economic risks of climate change are dramatic. It is therefore in the interest and the responsibility of all actors of society to contribute proactively to addressing these by reducing GHG emissions wherever possible.

This reduction is achieved essentially by reducing energy and resource consumption and by improving the efficiency of the energy and resources used. In that sense, re-using, recycling, and recovering as much of what is produced and consumed is one of the best possible ways to reduce GHG emissions and therefore to mitigate the risks posed by climate change.

PRO EUROPE's contribution to fighting climate change

PRO EUROPE and its members contribute to global efforts against climate change. They have worked extensively on reducing the environmental impact of packaging and packaging waste during the production process as well as its end-of-life management by reducing the energy and resources consumed and hence reducing its carbon footprint. This significant contribution to meet the climate and sustainability goals set by the EU tends to be largely underestimated or ignored by stakeholders.

Recycling

The carbon equation of the recycling process is in most cases clearly beneficial compared to the production of new products that involves virgin materials. The separate collection and recycling of packaging waste produces significant energy and GHG savings compared to the production of new packaging and products with primary raw materials.

Moreover, the environmental benefits of recycling and recovery are in general superior to alternate waste management options such as land-filling.

The impact of transport for collection and of the energy consumption of recycling facilities is marginal compared to the savings in terms of reduced pressure on natural resources such as water, energy and primary raw material.

In 2008, PRO EUROPE members have recycled or recovered about 32 million tonnes of packaging material. Looking at studies done by PRO EUROPE's members it can be concluded that 25 Million tonnes of CO^2 were saved by those activities

Eco-designing Packaging

PRO EUROPE members continuously support industry in the process of reducing and optimising packaging from a lifecycle perspective by sharing their knowledge and expertise with packers and fillers to ensure as few primary raw materials as possible are used in the production of packaging.

There are various ways to optimise packaging through improving their recyclability, reducing the amount of materials used, introducing recycled content, optimising logistics etc. This optimisation enhances energy and resource efficiency through less raw materials being used, less energy required in the manufacturing process, transportation efficiencies and use of more shelf space in store.

Packaging optimisation also means that protection of products is ensured and thereby preventing waste and greenhouse gas emissions. Product waste is indeed a major contributor to the production of greenhouse gases and by improving or adapting packaging, and using technology to increase shelf-life, it is possible to reduce packaging and food waste significantly[1].

Bringing Producer Responsibility to life

Decoupling waste generation from economic growth

PRO EUROPE members ensure the implementation of the producer responsibility principle in EU Member States and beyond. Producer responsibility is a key instrument of the transition to a more sustainable economy. Being responsible for the end-of-life of their products, notably by financing the collection and recycling/recovery of packaging they place on the market, producers are incentivised to reduce packaging and to use materials that are easier and less expensive to recycle.

The implementation of producer responsibility and cooperation between industry and authorities in the packaging sector has achieved great progress in decoupling the generation of packaging and packaging waste from economic growth in a number of EU Member States.

[1] WRAP - Household Food and Drink Waste in the UK, http://www.wrap.org.uk/retail/case_studies_research/report_household.html

Raising awareness and education

PRO EUROPE members have also carried out numerous environmental awareness campaigns and education partnerships with public authorities and other actors which, in the area of packaging waste, have certainly contributed to changing consumer awareness and behaviour towards environmental protection and climate change.

Targets for packaging recycling are currently based on weight, which makes measuring reductions in packaging waste and increases in recycling rates much easier and more easily understood. However, sometimes weight-based targets result in switches to lighter materials which can have a higher carbon impact during their whole life-cycle. Also, these targets do not prioritise one type of waste management over another, for example the recycling of glass cullet back into glass which affords much greater carbon savings than recycling glass into aggregate.

Are Carbon-based targets a way forward?

In theory, carbon-based targets could reduce the overall environmental impact of packaging, i.e. through concentrating efforts on prevention and increased recycled content, but carbon-based targets are not without their own issues. For example, some UK supermarkets have launched the sale of milk in plastic pouches which are not only lighter in weight but also have a lower carbon impact. However, they are much more likely to be sent to landfill as the infrastructure for collection and recycling of these does not yet widely exist.

In practice, this is not so easy due to:

- Difficulties in consistent approaches to measurement and reporting
- The assessment of packaging alone does not provide any assessment of the positive benefits through protecting products or prolonging shelf life
- Access to reliable and consistent data is often an issue for companies
- The carbon savings would vary dramatically through factors completely outside the producer's control such as the availability of recycling facilities in particular locations or the national energy policy of the country involved

For example in the UK, carbon is at the heart of the next phase of the Courtauld Commitment, a voluntary agreement established in 2005 involving over 40 major brand owners and retailers with the original aim of establishing absolute reductions in packaging waste by 2010. For the second phase the proposal is currently to reduce the carbon impact of packaging by 10% by the end of 2012. However, the plan involves the use of standard CO2 conversion factors which would raise similar issues as a weight target and so is unlikely to present a step forward, for example the crude metric proposed would not take into account the possible negative impact of reducing the packaging, even to the point that the shelf-life of the product is shorter and therefore could result in greater emissions through product waste.

Carbon assessment could however form a useful part of any assessment in reviewing packaging recycling targets in the future, either at an EU or national level. For example, analysis of optimum recycling rates could be based on estimates of the relative carbon savings at a high level rather than on individual assessments. For example in the UK the recent Packaging Strategy entitled 'Making the most of packaging- A strategy for a low carbon economy' is expected to drive future packaging targets beyond 2010 to concentrate efforts on those streams which are likely to produce the greatest carbon savings.

Also it is crucial to take into account that the Carbon Footprint of a packaged product is not the only (negative) effect to the environment. Every packaged product and its consumption have a Water Footprint, a SO^2 Footprint etc. Therefore it should be ensured that reductions in one environmental footprint are not offset by increases in another.

About PRO EUROPE

PRO EUROPE s.p.r.l. (Packaging Recovery Organisation Europe), founded in 1995, is the umbrella organisation for the packaging and packaging waste recovery schemes which use the "Green Dot" trademark. PRO EUROPE acts as the authoritative voice and common policy platform for its members, representing the interests of all packaging recovery and recycling organisations mainly using the "Green Dot".

PRO EUROPE's members span 33 countries: 26 Member States (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom), 2 candidate countries (Turkey, Croatia), Serbia, Norway, Iceland, Ukraine and Canada.

The members of PRO EUROPE wish to demonstrate that the recycling of used packaging is an important step on the path towards the sustainable development that is necessary to safeguard our planet for future generations. Their work in Europe and worldwide is both successful and transparent.

PRO EUROPE is headquartered in Brussels. The President is Henri Meiresonne (Fost Plus, Belgium), the General Manager is Joachim Quoden, and Pascal Gislais and Ursula Denison act jointly as Secretary Generals.

For detailed information, please visit www.pro-e.org