

National Newsbrief



Safeguarding Scotland's resources

It's a busy end of the year for the waste and recycling sector in Scotland. In September, the Scottish government launched "Safeguarding Scotland's resources – a programme for the efficient use of our materials". This consultation concentrates on the efficient use of raw materials and a specific policy proposal for changes to Producer Responsibility Regulations for packaging. In particular, it proposes that the existing legislation be amended to require reporting of packaging sold and collected in Scotland with a view to setting future targets different to those applicable in England and Wales. Packaging Trade Associations have responded by endorsing the concept of making more efficient use of resources but vigorously opposing any changes to the Producer

Responsibility Regulations that would have the effect of creating a Scotland-specific producer responsibility regime. In a similar vein, the Scottish Government have just launched a consultation entitled "The Scotland Recyclate Quality Action Plan" on a range of actions to improve and maintain the quality of recyclable materials that are collected, sorted and presented to the market in Scotland. Included in the action plan are proposals to address contamination at the point of collection, introduce mandatory and transparent material quality sampling, carry out a benchmarking exercise on the quality of source segregated materials and introduce a recyclate quality grading system. Consultation responses have to be submitted by 28th December 2012.



EU Parliament supports "permanent materials"

The European Parliament has voted that "future holistic resource policy should no longer merely distinguish between 'renewable' and 'non-renewable' resources, but should also extend to permanent materials". This distinction between "permanent materials" such as steel and non-permanent

materials acknowledges the sustainable contribution that steel and other metals make to society, notably through their infinite recyclability.

More information: www.metalpackagingeurope.com



More recycling in France

Recycling of packaging in France increased from 64% to 67% in 2011, with steel leading other materials by far. After 3 years of stagnation, this increase sets the country well on track to reaching the Grenelle law objective of 75% recycling (see Steel for Packaging Update 5 for more on this subject). Success

has been attributed to all actors in the recycling chain and their increased common understanding of the importance of recycling for local economies and the environment.

More information: www.ecoemballages.fr (website in French)

Editorial

APEAL, the Association of European Producers of Steel for Packaging, brings you its latest insight into the issues impacting steel packaging across Europe today.

The steel industry continues to play a prominent part in the European Union's strategy towards reaching a resource efficient Europe. We reveal key moments from the 2nd European Steel Day in Brussels, where European Commissioner Janez Potočnik once more applauded the industry's efforts towards creating a truly recycling society.

Previously, the European Parliament had voted to classify steel and other metals in their rightful place as "permanent materials", a new resource category alongside "renewables" and "non-renewables" underlining the unique contribution they make to society as infinitely recyclable materials. It is a big step for steel.

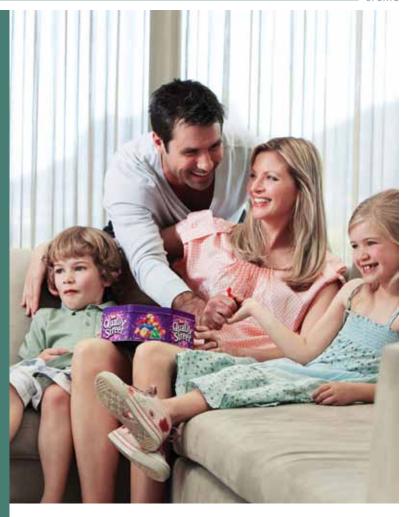
The United Nations Environment Programme (UNEP) is a key resource efficiency stakeholder. Two representatives, Prof. Thomas Graedel and Philip Strothmann, give their vision for sustainable development and an insight into what they consider to be the contribution of steel.

Continuing the focus on steel and sustainable development, discover how APEAL member ArcelorMittal "transforms tomorrow" through biodiversity.

Finally, because steel for packaging must not only be sustainable but must also deliver efficiency along the entire value chain, APEAL makes the benefits of steel packaging clearer for the steel packaging community and stakeholders in a new multi-platform website, www.steelforpackaging.org.

Explore and enjoy!

Patricia Mobbs Editor



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Spotlight on steel

APEAL joined the 2nd European Steel Day in Brussels and presented 4 key figures for packaging steel in Europe.

Competitiveness, innovation and the life cycle benefits of steel were at the heart of the European Steel Day in Brussels. The event brought together 400 representatives from the European institutions, EU member states and EU steel industry as well as a number of high level journalists.



Janez Potočnik speaking at the Conference

For the second year in a row, the European steel industry came together to tackle current industry challenges and communicate a shared vision, through the voice of Eurofer, The European Confederation of Iron and Steel Industries. APEAL used this event as an opportunity to present the key figures of steel for packaging in Europe.

Current sustainability challenges for the steel industry

The "Roadmap to a competitive low-carbon economy in 2050" was presented to the European Commission in 2011 by Slovenian MEP, Romana Jordan, Member of the Committee on Environment, Health and Food Safety (ENVI). With this roadmap the EU agrees to reduce greenhouse gas emissions by 80-95% (if other developed countries set the same target and emerging countries contribute according to capabilities). All

major industries, such as the steel industry, have been asked to present sector-specific roadmaps in order to lay open the potentials in each sector and realistic contributions that can be achieved.

The steel industry has always been highly proactive in improving energy consumption and reducing carbon emissions. Indeed CO₂ emissions are today 50% lower than they were 40 years ago. However, the targets and reductions that the EU is calling for today will require the breakthrough and implementation of new technology that is unlikely to be available in the next 10 years.

Consequently, in its new steel roadmap the steel industry aims to continue emission reduction through a life cycle approach, identifying and optimising steel use from the design phase of a product to its end-of-life management.

The European tinplate life cycle inventory carried out by APEAL in 2011 is a clear example of this. LCI data released early this year identified that the steel packaging industry had lowered its global warming potential, mainly CO₂ emissions, by 9% over 2 years.

Janez Potočnik, European Commissioner for the Environment, applauded the support given by the steel industry to advancing the life cycle approach as a way of achieving greater resource efficiency.

Indeed, the efficient use of natural resources is critical to sustainability, and the EU has responded with the 2011 "Roadmap to a resource efficient Europe". Implementation of this roadmap will concern environmental footprints, full life cycle approach, reusability, recyclability, recycled content, landfill ban etc. During the plenary conference session, Potočnik explained that achieving EU resource efficiency goals would already take the EU half way to achieving its climate goals. Some may see steel as a material of the past, he said, whereas for him steel is clearly as a material of the future. He highlighted the need to boost resource efficiency across the life cycle, promoting the use of recyclable materials in the design phase, increasing recycling rates and eliminating landfill. These were positions that he had already shared with the metal packaging community during the "Metal's contribution to a resource efficient Europe" debate in January.



Robert Beltz, President of APEAL



Catherine Jung, Chair of APEAL Management Committee



Anders Linde of Metal Packaging Europe

APEAL PRESS CONFERENCE:

"7, 9, 71 & 80: The key figures for packaging steel in Europe"

key benefits of Steel for Packaging, as demonstrated by the new one-stop information site www.steelforpackaging.org

decrease in global warming potential, mainly CO₂ emissions that the steel for packaging industry has achieved over the last 2 years

7 1 0/ average steel packaging recycling rate across Europe in 2010

recycling rate target for metal packaging, set by the metal packaging industry itself, to be achieved by 2020.

"Steel has an important amount of knowledge (to share) as a front runner of recycling,"

Claude Turmes, Green Party Vice-President





Steel

a "permanent material" is recognised

When the European Parliament adopted the "Roadmap for a Resource Efficient Europe", presented by Gerben-Jan Gerbrandy, it was a measure of double importance for steel packaging.

Indeed the Roadmap contained many measures towards resource efficiency that are wholeheartedly supported by APEAL, such as a ban on landfill, increased recycling and a revision of the waste recycling targets set in the Waste Framework directive. Yet one measure in particular stood out as an endorsement of the positive contribution that steel can make to European sustainability policy and resource efficiency.

The European Parliament voted with an overwhelming majority that steel be categorised alongside other metals in a new resource category of "permanent materials". The focus is on "permanent materials" as a permanently available resource that can be used again and again, with no loss of quality or initial properties. Steel is an element that cannot disappear. When steel products reach the end of their useful life, the steel from which they are made can be recycled and reused to make another product application. This gives rise to a continuous material loop, for it is only the product application (such as a can, car or plane) that reaches the end of its useful life, not the material. Steel remains as a permanently available material resource with endless recycling possibilities.





This new resource category will work alongside the existing resource categories of "renewable" and non-renewable" thus recognising the positive role of infinitely recyclable "permanent materials" such as steel in society.

The endorsement by the European Parliament builds on the work already undertaken by Metal Packaging Europe (MPE) to bring resource efficiency to the forefront of EU Policy. By combining the knowledge of leaders from the major material producers and packaging converter companies in the industry, MPE have begun to educate key stakeholders, through a personal and media engagement programme, to the importance of resource efficiency and decoupling consumption for product creation from resource use.

A VOTE IN THE EUROPEAN PARLIAMENT, what does this mean?

Resource-efficiency is one of the seven flagship initiatives in the 'Europe 2020' strategy for sustainable growth and jobs, endorsed by EU heads of states in 2010.

The concept means decoupling economic growth from natural resource use – including raw materials, commodities, water, air or ecosystems.

The European Commission unveiled its "Roadmap to a Resource Efficient Europe" in September 2011. Now the European Parliament has given its recommendations for future resource efficiency policy making.

During one of these initiatives, the Brussels debate "Metal's contribution to a resource efficient Europe; what is more sustainable than permanent?", APEAL had highlighted the importance of recycling as a key element of the resource efficiency debate emphasizing the environmental and economic gains to be made from recycling steel packaging.

The next steps will be to build on this momentum and continue to explain how recyclability and the promotion of innovative collection, sorting and recycling technologies can continue to provide benefits in Europe's roadmap towards resource efficiency.

"Steel is a 'permanent material' whose endless recyclability actively contributes to increasing resource efficiency", commented Evelyne Frauman, Quality and Environment Manager of APEAL, "the whole industry should support this recognition of 'permanent materials' alongside 'renewables' and 'non-renewables', and ensure that the 100% recycling potential of steel packaging is achieved".

"Permanently available materials are those for which efforts are made to retain for use in society the energy and raw materials invested in their production at the end of the product life, either through reuse or recycling, with no loss of quality no matter how many times the material is recycled. British Standards, BS 8905:20



The Interview

Prof. Thomas Graedel and Philip Strothmann of the United Nations Environment Programme (UNEP)

UNEP is the voice for the environment within the United Nations, and it has made resource efficiency one of its priority areas for action.

Within UNEP, the International Resource Panel (IRP) is a panel of experts that supports science-based policy making. Thomas Graedel, Chair of the IRP's Metals Working Group, and Philip Strothmann, working for the IRP Secretariat, elaborated their view on steel packaging's contribution to resource efficiency.

APEAL:

Resource efficiency is a major theme internationally and in the EU. It is one of UNEP's priority areas for action.
What are your concerns about resource efficiency going into the future?

Strothmann: Globally, we are extracting more and more resources to produce goods and services, while a large share of an increasingly urban world population is still struggling to meet basic needs. Resource efficiency represents a critical opportunity to address this unsustainable path, and contributes to building green economies in which economic growth is decoupled from environmental harm. UNEP defines resource

efficiency from a life cycle and value chain perspective. This means reducing the total environmental impact of the production and consumption of goods and services, from raw material extraction to final use and disposal.

Both UNEP's IRP and the Life Cycle Initiative (LCI)¹ seek to enhance our scientific understanding of the environmental challenges caused by our current use of resources and attempt to identify the best ways to enhance resource efficiency. This is crucial, as there are still many areas where we as a society need to mainstream the usage of resource efficient products and services. In addition, forthcoming reports of the IRP show



Philip Strothmannn is a partner consultant for the Integrated Resource Management unit of the UNEP Division of Technology, Industry, Economics (DTIE) in Paris. He works on the DTIE's activities with regards to metal and also supports the LCI and IRP secretariats.

that we do not only need to be more efficient, but also change our consumption patterns, if we want to enhance and balance the living conditions on a global level.

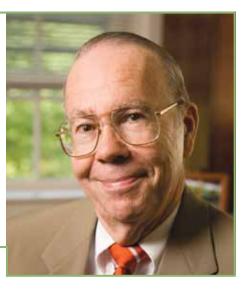




¹ a partnership between UNEP and the Society for Environmental Toxicology and Chemistry (SETAC) to enhance the global use of science-based life cycle approaches. Recently the European Parliament endorsed the concept of steel as a "permanent material". What is your take on this concept, and its role in the resource efficiency debate?

Graedel: While metals do not disappear as elements, they do not remain permanently accessible either, which is the real challenge. In addition, while you highlight with your concept the endless recyclability of metals, this only applies if none of the metal is lost or degraded during the collection of obsolete products and their subsequent recycling. Metal recycling of products is usually a highly complex process, which will never yield a 100% recycling rate, due to thermodynamic and metallurgical limitations. Thus I believe that the debate around resource efficiency should not be simplified too much by introducing concepts that overly simplify a very complex issue. It is more important to enhance the general understanding of the scientific complexities, which is what the IRP as a science policy interface seeks to contribute to.

Professor Thomas Graedel is a Professor of Industrial Ecology at Yale University's School of Forestry and Environmental Studies (USA), as well as Professor of Chemical Engineering, Geology and Geophysics. He is also Director of the Center for Industrial Ecology. Professor Graedel's research focuses on developing and enhancing industrial ecology, and on the organizing framework for studying interactions between our modern technological society and the environment. As part of the IRP, Prof. Graedel chairs the Metals Working Group.



UNEP has stated that it believes in recycling as a key element in the resource efficiency debate, but that society should aim for qualitative targets as opposed to quantitative. What do you mean by that?

Strothmann: Absolutely, according to UNEP's Decoupling Report "waste recycling represents one of the most immediate, tangible and low-cost investments in dematerialization available. It saves on capital costs, creates jobs, and forces the middle classes to take greater responsibility for the resources they throw away". However, it is not helpful to call for stronger quantitative recycling rates, which technologically cannot be fulfilled.

What do you believe are the keys to a truly recycling society?

Graedel: A crucial element is a general understanding in society that some of the resources we are using daily are limited, in the sense of their availability or their accessibility. and as such it is essential to use them in a more sustainable way. Of course technological solutions are equally relevant. These solutions however should not only address the end of a product's life cycle. Rather a product designer should be familiar with "design for sustainability" and "design for recycling" concepts and thus take the end-of-life of a product into account while designing it. To this end, science is required to provide guidance to designers, which trade-offs should be considered and which environmental impacts from a life cycle perspective are connected to the usage and combination of various materials. To this end the LCI ensures that a sound scientific methodology is applied.

You lay the emphasis on "accessibility" and not "availability" as being a key issue for steel. What exactly do you mean by that?

Strothmann: Availability is not an issue for primary steel resources although it is highly complex to assess geological stocks of metals in general. The availability of secondary material is more of an issue for steel, meaning that the used steel material that is recovered does not equal global demand for new steel products. Accessibility of steel on the other hand, is challenged by a number of other factors beyond the geological one. These include geopolitical, social, environmental or economic factors. The knowledge about an iron ore deposit does not necessarily mean that it will or can be exploited.

You recently commented on the can as a best practice in eco design. That's interesting for us, can you enlarge on that?

Strothmann: My comment referred more to the general recyclability of a can. Since a metal can is composed of fully recyclable metals, it can be recycled without significant loss of material, which is environmentally beneficial. However, in considering environmental impacts of products in general, recyclability is important but not the only factor which would need to be considered.

www.unep.org/resourcepanel www.lifecycleinitiative.org

ArcelorMittal

Transforming tomorrow through biodiversity



The ArcelorMittal Group, as a consumer of natural resources, recognises a clear responsibility to minimise the impact of its activities on the environment and support local biodiversity around its production sites.

There is a particular tradition of respecting biodiversity in France. This is most often attributed to France's odd positioning as both a developed country and a hyper-diverse territory, combining a huge maritime territory and overseas countries, such as the tropical rainforest of French Guiana.

Indeed Jean Monnet, French political economist and one of the founding fathers of the European Union, once said 'Our only choice is between letting ourselves be swept along by change, and change that we are able to effect voluntarily.'

Beyond the intrinsic beauty of species and their natural habitats, there are numerous arguments for protecting biodiversity. When one thread of the tapestry of life disappears, it leaves a gap which can only be filled through a slow process of evolution. In this way, a species of insect that becomes extinct may lead to the extinction of plants that depend on them for pollination. Biodiversity encompasses all forms of life, be they domesticated, wild, common or rare.

True to this tradition, ArcelorMittal France takes proactive action each day to protect and promote the development of biodiversity around its sites as an integral part of its corporate responsibility strategy, as illustrated by the two packaging production sites in Northern France.

The Basse-Indre packaging production site

The plan for the rehabilitation of the mudflats at the Basse-Indre site began over 10 years ago, after the implantation of the second waste treatment station. Species of plants capable of biologically purifying the contents of the reservoir were planted. Regular follow-up measures made it possible to verify the effectiveness of this 'plant-based processing'. The effects were highly positive in terms of the biodiversity of both animals and plants. Plant species that had disappeared from the Basse-Indre landscape, such as the rare species of Loose Flowered Orchid or the Snake's Head Fritillary, have now returned. Numerous animal species now cohabitate, such as pheasants, grass snakes, grey herons, and foxes, as well as Argus butterflies.

The Dunkirk / Mardyck production site

Walls of steel conceal a rich biodiversity on this 680-hectare site (450 in Dunkirk, 230 in Mardyck). A differentiation plan promotes the development of both plant and animal species and contributes to restoring an ecological corridor to the region.

The rare Snake's Head Fritillary has returned to the Basse-Indre reservoir





On the Biodiversity Trail circuit



Basse-Indre landscape



Volunteer beekeepers, employees of ArcelorMittal



Peregrine falcon at the cokeworks in Dunkirk

For example, a bird sanctuary is home to some hundred species of birds. The site accommodates exactly 136 out of the 400 endangered species in Europe. For the past 2 years, a pair of Peregrine falcons has been nesting at the level of the Dunkirk Cokeworks, an exceptional phenomenon followed closely by ornithologists. This couple produced offspring. They later moved on, only to be replaced by a new pair who recently settled into the same location.

A beehive was built on the green hill of the Dunkirk site. This former rubbish tip is now covered by grass and natural rainwater ponds that have been formed to encourage the development of biodiversity. Company employees acting as beekeepers in their spare time carefully maintain these hives. Other employees have taken part in the honey harvest, discovering a fascinating new world.

A frog pond was also created near the office buildings. In 2011, a 5-year agreement was signed with the CEN ("Conservatoire des Espaces Naturels", French Environmental Conservation agency) in order to carry out an inventory of faunaflora and to come up with a management plan.

In November 2011, a reed bed that had been overrun by willows was restored in such a way as to recreate a genuine biodiversity reservoir. This worksite, realised according to the recommendations of expert naturalists, was implemented jointly with a specialised social association for job reintegration (Ecoflandres) and a civil engineering company (STC Courtois).

"Biodiversity tours"

On-going efforts to reclaim the natural areas at these the production sites have provided shelter and encouraged the flourishing of various species of fauna and flora. The results of this astonishing cohabitation between nature and industrial production have been made available to the public through a specially created "Biodiversity tour", each section of which is marked by informative panels and observation points.

Such results are the legacy of ArcelorMittal's active pursuit of a balanced relationship between the industrial sector and the environment; its continuous effort towards 'transforming tomorrow', the natural way.



The hive on the green hill at the Dunkirk site



Staying connected

APEAL launches www.steelforpackaging.org, a new multi-platform information site containing all the facts and figures about Steel for Packaging.

The expectations of Steel for Packaging's key stakeholders are changing. Earlier this year APEAL recognised the necessity to enhance its support in order to meet those changing expectations.

While APEAL has accumulated a wealth of data about Steel for Packaging during its 25 years of experience, the industry needed an innovative platform for those messages, facts and figures that would be completely in line with evolving technologies and new stakeholder needs.

APEAL's new one-stop information website, steelforpackaging.org is structured to highlight the seven key supply chain benefits of Steel for Packaging: Recycling, Performance, Use, Manufacturing, Efficiency, Versatility and Safety.

The information website is simple, clear and easy to use. Enhanced new functions include multi-platform accessibility and the possibility to export information into other applications.

Available for use with PC, laptop and tablet

Easy to export into powerpoint and pdf



The combination of multi-platform accessibility and clear structuring of information into key supply chain benefits is a unique feature of the site.





"The number of users in the first few months has exceeded APEAL's expectations. It looks like **steelforpackaging.org** could be well on its way to becoming the first point of reference for all information about Steel for Packaging."

Patricia Mobbs, Communications Manager of APEAL



A new President for APEAL

Christian Korn of U. S. Steel Košice is the new President of APEAL, succeeding Robert Beltz who returned to the United States in July 2012.

Korn's election continues both APEAL's presidency under U. S. Steel Košice and APEAL's current mission of ensuring the widespread understanding of steel as a sustainable packaging solution.

APEAL is set to benefit from Korn's extensive experience in the steel business. He started his industry career in 1982 with the pipe division of the building products group of Saint Gobain. He joined Usinor (now ArcelorMittal) in 1988, where he held several positions in sales and as managing director of service centres in Germany,

France and Benelux. In 2002, Korn joined the executive board of ThyssenKrupp Stahl Service Center GmbH (Langenfeld, Germany), a business unit leading ThyssenKrupp's flat carbon steel service center activities in Europe, where he soon became chairman of the executive board. In 2009, he joined Essar Steel Europe and was responsible for creating and developing the company's European sales organisation.

Korn graduated from University of Tubingen, Germany with a German Law Degree in 1979 and completed the Bar Examination in 1982. He also studied Business Administration at the University for World Trade in Vienna, Austria.



Discover the 7 key benefits of Steel for Packaging...

www.steelforpackaging.org

LIST OF FORTHCOMING PACKAGING EVENTS AND EUROPEAN PARLIAMENTARY SESSIONS

14 - 17 January European Parliament Plenary Strasbourg, France	
29 January - 1 February UPAKOVKA – UPAK ITALIA www.upakovka.messe-duesseldorf.de Moscow, Russia	
4 - 7 February European Parliament Plenary Strasbourg, France	
6 - 7 February Aerosol & Dispensing Forum 2013 www.aerosol-forum.com Paris, France	
27 - 28 February European Parliament Plenary Brussels, Belgium	
27 - 28 February Packaging Innovations www.easyfairs.com Birmingham, United	Kingdom
11 - 14 March European Parliament Plenary Strasbourg, France	
17 - 30 March PRO2PAC www.pro2pac.co.uk London, United King	dom
27 - 28 March EMPACK www.easyfairs.com Hertogenbosch, Net	nerlands
10 - 11 April PACKAGING INNOVATIONS WARSZAWA www.easyfairs.com Warsaw, Poland	
10 - 12 April PACK FAIR www.packexpo.koev.ua Kiev, Ukraine	
15 - 18 April European Parliament Plenary Strasbourg, France	
17 - 18 April PACK & EMBALLAGE www.easyfairs.com Malmö, Sweden	
17 - 18 April VERPACKUNG www.easyfairs.com Zürich, Switzerland	
16 May Eurofer Steel Day www.eurofer.org Brussels, Belgium	
19 - 23 May IPACK-IMA www.ipack-ima.com Milan, Italy	

Languages available:

English (printed version)

English, French, German, Spanish (online version at www.apeal.org)

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APEAL

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