The European plastic industry, a partner in sustainable development

Plastics
The Material for the 21st Century

The Plastic Island is an interesting project from visionary Dutch Architect Rudolph Eilander.

PLASTIC ISLAND

The goal of the Plastic Island Project is to use the existing Great Pacific Garbage Patch that was discovered twelve years ago by Charles Moore, to develop a selfsustaining island inhabited by around 800 people that will collect and recycle the tons of plastic floating around our oceans.

The Great Pacific Garbage Patch consists of over 9 million km2 of plastic waste that is killing millions of animals yearly. Located in international waters, this is currently everybody's problem, but nobody's responsibility. The Plastic Island Project addresses the need to keep our waters clean and protect our wildlife.

The concept of Plastic Island is revolutionary on three fronts: the global approach of its conception; its approach on waste-collecting without chasing it; and the 100% self-supporting concept.

As the vastness of the Garbage Patch rules out chasing down the debris; a single-spot approach is chosen instead. Wind, water and waste streams are relatively constant factors in the oceans and bring the waste TO the Island. Its three-point star shape consists of plastic pontoons. Membranes of 80 km long and 100 meter deep used to capture the debris are attached to the ends of the three tips. The location of the Island will be stationary. Ships or kites pulling the membranes will provide the slow rotation of the Island necessary to collect the waste, but giving marine life a chance to escape. The collected plastic will be recycled into usable products on the Island itself. The surface of the island is used for various purposes to make living on the Island possible and comfortable.

As the Garbage Patch is located in international waters, no nation or company can be held responsible. Cleaning up the Patch will therefore have to be an international operation with countries and multinationals working together. Let's ACT.

www.plasticisland.org

PlasticsEurope – Who we are

PlasticsEurope is the organisation representing the interests of Europe's plastics manufacturers.
We are networking with European and national plastics associations and have more than 100 member companies, producing over 90% of all polymers across the 27 EU Member States plus Norway, Switzerland, Croatia and Turkey. We have developed close partnerships with sister associations that represent the European plastics manufacturing chain, which includes 50,000 converters and over 1,000 machinery manufacturers.

PlasticsEurope is the only Brussels-based European trade association with representations in every EU Member State. In addition to the Brussels head-quarters, regional offices are located in Frankfurt, London, Madrid, Milan and Paris.

Foreword by Jacques van Rijckevorsel President of PlasticsEurope

We must nurture innovation in our industry

We all hope that we are at last emerging from the worst financial crisis in history. In 2009 we had to adjust to a year-on-year decline in production of over 16% and our industry is currently trying to withstand after-shocks which imply structurally lower growth and restructurings.

In this challenging context, our number one strength is that plastics play a crucial role in meeting the fundamental needs of today's society. Plastics have steadily generated welfare and progress by saving energy and other valuable resources through their inherent properties such as lightness and insulation. In addition plastics offer unique levels of protection in applications such as packaging and medical devices. And plastics continue to be at the forefront of product innovation not just in their own right, but also by enabling innovations in the use of traditional materials.

This current duality, a step back in growth for a state-of-the-art material with so much to offer, should redirect us to focus on the potential for the sustainable solutions that our industry can provide. Generating as much GDP as the massive automotive industry, we have the responsibility to proactively drive a sector of over 50,000 companies, directly employing some 1.6 million people, and generating €300 billion of revenues annually.

Continuous innovation, fuelling international competitiveness and sustainable growth, is more than ever the key driver for a sustained success. Retaining investment in our European companies is therefore not only a necessity, but is also becoming a challenge in a highly regulated region. Innovation is one of Europe's few natural resources and needs to be further nurtured and harvested.

Another concern emerging steadily as a challenge for our industry is the end-user behaviour that is resulting in plastic littering, which threatens the sustainable development of our industry and the related progress of our society. Although we can never be in control of end-user behaviour, as an industry we recognise that we must react and play our part to help to find ways to overcome the consequences of such behaviour.

As the world's population grows, our opportunities and society's needs will evolve. It is our duty to demonstrate that plastics remain among the best materials to meet those needs: protecting the climate, keeping consumers safe and driving sustainable development.

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Introduction by Wilfried Haensel, Executive Director, PlasticsEurope

We are a partner in sustainable development

The challenges we are facing as a society today are global and unprecedented in their complexity. It is clear that a new approach is needed as we look to shape the post-crisis society.

PlasticsEurope strongly believes that solutions can only be found through dialogue and collaboration. The plastics industry is aiming to be a responsible partner to policy-makers and other stakeholders in finding solutions to the crucial issues of climate change, societal health and wellbeing, and the economic crisis.

One of PlasticsEurope's key goals is to increase understanding among our stakeholders of the potential of plastics to contribute to these solutions, as well as the steps that we as an industry are taking to tackle some of the associated issues such as waste management.

Collective action also means that the plastics industry needs to come together to define our own industry's solutions. While PlasticsEurope represents the plastics manufacturing industry, we are working closely with our value chain (converters, recyclers and machine manufacturers) to develop a common plastics industry vision and approach.

Plastics themselves are crucial materials in the move towards sustainable development.

Plastics are key enablers of many significant environmental product innovations. Plastics products deliver huge energy savings in applications such as packaging, transport and insulation. Waste plastics offer also significant resource savings through efficient recycling and energy recovery.

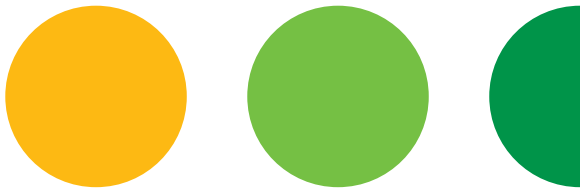
From vital applications - ranging from medical and diagnostic equipment to protective clothing and safety components in cars, plastics are also integral to providing a safer, healthier environment.

And, in these troubled economic times, we should also remember that the plastics industry is a major contributor to European prosperity. Plastics were invented in Europe, and we remain the world's biggest plastics producing region by volume.

Nevertheless, these benefits are all too often overlooked. Popular perceptions of plastics are tainted by the consequences of irresponsible behaviour such as littering, and these misperceptions can result in misguided purchasing decisions and clumsy regulation. This situation has potentially negative consequences, both for the environment and for society more broadly. Addressing negative views of plastics is therefore essential to help maximise the benefits they can bring.

As we look to the future, PlasticsEurope will continue trying to be a catalyst for the generation of new ideas and solutions. Tough decisions will need to be made as we find ways to manage the range of issues confronting the planet, but we can be sure that plastics will remain a key contributor to meeting the needs of our burgeoning population in the face of increasingly scarce natural resources.

"PlasticsEurope will continue to work to achieve a legislative framework that encourages eco-efficient use of plastics."



Plastics and the environment

The issue of climate change has rarely been far from the top of the political agenda in recent years. It is quite clear that achieving a truly sustainable global society requires identifying and implementing all-encompassing resource solutions which focus on the entire lifecycle of a product from cradle to grave, from manufacturing through use phase to recovery at the end of its useful life.

Plastics manufacturers recognise that they have the opportunity to play a leading role in providing these resource solutions – It is essential to our future competitiveness that we do so. Plastics already greatly contribute to saving energy and reducing greenhouse gas emissions. A 2009 research study by Denkstatt (an international consultancy for sustainable thinking) estimates that the plastics products currently in use in the EU-27 annually save at least 2.3 million GJ energy in comparison to traditional materials. These savings are equivalent to 50 million tonnes of crude oil, or more than 120 Mt CO_2 equivalent greenhouse gas emissions. To put it another way, today the GHG emissions saved each year by using plastic products in Europe are equivalent to the total CO_2 emissions of Netherlands. These savings could grow substantially if the potential of existing plastics solution should be further exploited.

PlasticsEurope will continue to work to achieve a legislative framework that encourages eco-efficient use of plastics. The EU's adoption of a new Waste Framework Directive during 2008 was a great step forward in this regard, as it gave legal recognition to the environmental benefits of innovative recycling and efficient energy-from-waste technologies.

We remain committed to contributing to the resolution of the significant environmental issues we all face. PlasticsEurope continues to engage in identifying new solutions to these crucial societal challenges.

"During a car's lifetime of approximately 150,000km, this will save some 750 litres of fuel."

Sustainable materials and a sustainable industry

Plastics insulation – saving energy, cutting CO_2 emissions and lowering costs
New high performance insulating plastics are changing the construction and energy landscape. They are lower-cost products that are quick and easy to install. They are durable, often maintenance-free and, above all, the amount of energy required to manufacture plastic insulation for a standard home pays for itself within one year.

To illustrate the energy saving potential of plastics insulation, it was calculated in 2005 that the net energy saving enabled by all plastics insulation materials used in the building sector in 2004 in Europe would be 9.500-19.900 Million GJ of energy across their total lifetime, preventing 0,536-1.120 Million tonnes of CO_2 equivalents.

To look at it another way, the energy needed for the production of plastic insulation materials is in general already balanced by energy savings within the first 4 months of their use-phase. In their total life cycle plastic insulation boards save 150 times more energy than was needed for their production.

Buildings are responsible for some 40% of the EU's total energy consumption. Better thermal insulation of our buildings is one of the most crucial steps in the journey towards an energy- and resource-efficient Europe.

Lightweight transport – plastics in cars save 17 million tonnes of CO_2 per year; plastics in planes reduce fuel consumption and greenhouse gas emissions by 20%.

Apart from technical qualities such as anti-corrosion, cost reduction and design freedom, using plastics in cars also brings important environmental benefits. A modern mid-range car weighing approximately 1,300kg contains approximately 12% (i.e. 150kg) of plastics, which save approximately 50-60% in weight compared to alternative materials. During a car's lifetime of approximately 150,000km, this will save some 750 litres of fuel. When scaled up to the entire European car fleet, this reduces CO_2 emissions from transport by some 17 million tonnes.

Plastics not only contribute to weight reduction and energy savings in cars but also to the protection and safety of passengers and pedestrians. Many of the safety applications in a car are made of plastics (airbags, safety belts, plastic bumpers etc.).

The benefits of weight reduction through plastic materials also apply to other types of transport. The use of glass-reinforced plastic panels in Swiss trains has led to a 25% reduction in weight. In aviation, the pressures to deliver improvements in CO_2 emissions have resulted in a new generation of planes.

One of these new aircrafts is the Boeing Dreamliner. Quartz-reinforced resins, the so-called plastics composites, account for 50% of the material that is used to build it; and both fuselage and wings will be made almost exclusively from composites, an absolute first in this industry. The Dreamliner will be 20% lighter than a comparable plane of this size, reducing fuel consumption and greenhouse gas emissions by 20%.

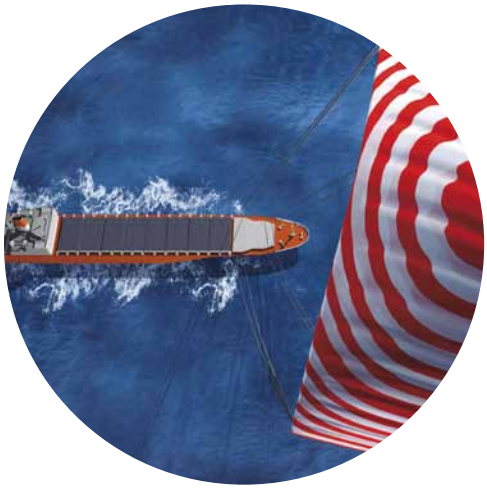
Smart (green) packaging

Efficient packaging is one of the keys to reducing the average European's ecological footprint. Eco-design considerations reconcile the intention to reduce overall life-cycle impacts with the need to maintain performance and value for money. For packaging, this translates into direct and indirect resource efficiency, recycling, reuse and waste reduction.

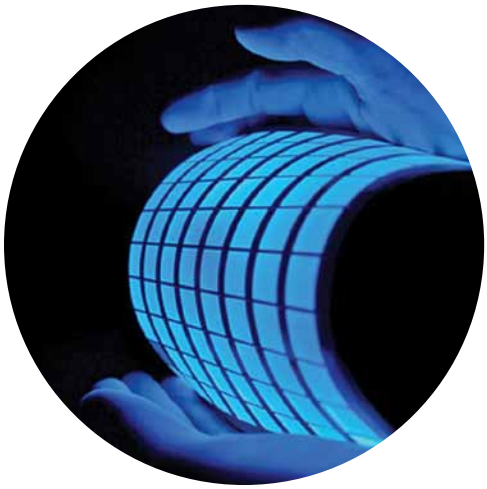
By extending the shelf-life of food and therefore controlling food waste volumes, packaging actively reduces the overall environmental impact of food production. When it comes to maintaining food, plastics have enabled important innovations such as oxygen scavengers (additives capable of reducing the oxygen transfer into the package) and interactive films have been highlighted in a report by UK government agency WRAP (Waste and Resources Action Programme). In developed countries where packaging is used there is only 3% of food wastage compared to 50% in developing countries. This results in significant energy and emissions savings as the reduction in food wastage means less food production, processing and transport.

E&E: Shedding a new light... on lighting

The contributions of plastics to electric and electronic (E&E) applications are many and here they also make an important contribution to sustainable development. One clear example is OLEDs (Organic Light-Emitting Diodes). They are polymers that, following the application of a minimum amount of electrical current, emit light in different colour bands.



A significant advantage of OLED displays over traditional liquid crystal displays (LCDs) is that OLEDs do not require a backlight to function. They can display true black colour, draw far less power, and can be much thinner and lighter than an LCD panel, also saving on transport-related emissions. Energy is also wasted in LCDs because they require polarisers that filter out about half of the light emitted by their backlight. For mobile devices in particular, the lower energy consumption of OLEDs results in less need to charge the battery (lower consumption of electricity), longer battery life, and smaller batteries that require less material to produce.



Eco-efficient management of plastics waste

Statistics and trends

According to 2008 figures, the recovery rate of post-consumer end-of-life plastics now stands at 51.3% in EU27+NO/CH, with the recycling rate continuing to increase to 21.3% and energy recovery reaching 30%. The volumes of plastics going to landfill have continued to fall across Europe.

These promising results were achieved by using a range of complementary waste management options, each one addressing the intrinsic attributes of the various plastic waste streams. According to their chemical composition, plastic waste can be recycled back into plastic, can be decomposed into different and reusable raw materials or turned into energy. In other words, plastics waste is too valuable to go to waste – it is a tool for optimised resource efficiency.

"Plastics waste is too valuable to go to... waste!"

Waste Framework Directive

The increasing quantities of plastics being recovered in Europe have, as of June 2008, a legal basis for continuing their upward trend. From the moment the European Union passed the Waste Framework Directive (WFD), the word 'recycling' started to encompass more types of recycling technologies than before. The plastics industry foresees that this decision will not only encourage new sustainable ways to deal with waste that would otherwise end up in landfills, but will ultimately stimulate progress in all types of recycling and recovery options.

Member States will reduce the volume of waste going to landfill and promote alternative waste management options. For the revised WFD, an ambitious target of 50% has been agreed for the recycling of household waste. So far, countries like Austria, Belgium, Denmark, Germany and the Netherlands are already achieving this goal. Others have different challenges ahead and a wider recycling definition will help them reach the objective.

The revised WFD also classifies efficient energy-from-waste plants as recovery operations, helping to reduce Europe's dependence on fossil fuels and landfills. More than that, it will help the general public to understand the role of energy recovery in the eco-efficient management of our dwindling stocks of natural resources.

Marine litter

Plastics manufacturers are extremely well aware of the concerns that exist around litter in the oceans, and share these concerns. It is unacceptable that litter in general, including plastics, is found discarded in marine and river environments.

We are engaged in discussions with experts in this field to ensure the most thorough understanding of the issue and identify the necessary effective solutions to be found for plastics.

PlasticsEurope industry action teams

At the end of 2007, PlasticsEurope announced the creation of three Industry Action Teams (IATs). The task of these Teams was to investigate the major challenges facing society and come up with ideas for how plastics can provide ever more effective solutions to address them.

The teams identified three major work programmes to reflect the most important issues society is facing: Energy Efficiency and Climate Protection, Consumer Protection and Resource Efficiency.

The following are some highlights from the Industry Action Teams programmes:

Climate Protection Booster
The Climate Protection Booster is a project designed to support the plastics' industry activities through independent, credible and scientific data which prove plastics contribution to preventing climate change.

The study assesses the impact of plastics on energy consumption and greenhouse gas emissions in Europe. The ultimate objective is to demonstrate the potential plastics are offering to reducing emissions and energy use contributing thus significantly to climate protection and energy efficiency.

Michel Loubry
Programme Director
"Sustainable behaviour must be based upon sound science. PlasticsEurope's vision for the Eco-Footprint is a tool that can help drive sustainable choices by industry, policy-makers and ultimately consumers."

Eco-Footprint
One of the ambitious goals of the Energy Efficiency and Climate Protection programme is to participate in the development and promotion of a new method for calculating the environmental impacts of products across their entire lifecycle.

The result is the **Eco-Footprint** concept. While built on scientific progress and previous experience, it aims at helping for the creation of an entirely new sustainability indicator that covers the 3Ps: People, Planet and Profit, meaning it assesses the ecological, economical and societal aspect of an activity or product.

The design and implementation of the Eco-Footprint methodology will be done by qualified researchers and consultants. In parallel, the programme team is establishing contacts with other organisations in order to bring all initiatives together, to explore funding and resource collaboration.

Michael Poulsen

Consumer & Environmental Affairs Director

"Furthering knowledge and understanding of plastics, both within our industry and among our stakeholders, is at the heart of what PlasticsEurope does. Eco-profiles and EPDs are key tools in ensuring safe and sustainable products and processes."

Eco-profile reports and Environmental Product Declarations (EPDs)

PlasticsEurope was the first industry organisation to assemble detailed environmental data on the production processes used by its member companies, with the firm intention of making this information available for the public. The first PlasticsEurope Eco-profile reports were published in 1993 and since then, further reports have been added and continuously updated. There are now more than 70 Eco-profile reports freely available from the PlasticsEurope website.

PlasticsEurope's eco-profiles are widely acknowledged among life-cycle consultants and other stakeholders worldwide as the most representative datasets for polymers. They have been used in various commercial life-cycle databases as well as in the publicly available European Life Cycle Database (ELCD) operated by the European Commission's Joint Research Centre.

PlasticsEurope has made EPDs publicly-available for most commodity plastics, like suspension and emulsion PVC, amorph and bottle grade PET, HDPE, LDPE, etc.

Knowledge Transfer

Plastics waste is a valuable resource

According to current statistics, over 50% of all post-consumer plastic waste in Europe, including Norway and Switzerland, is recovered through recycling or energy recovery. Figures also show a disparity between the most efficient countries and the ones, where waste is predominantly disposed to landfill. Some countries recover up to 100% and others have a rate below 20%.

The purpose of the Knowledge Transfer Project is to present and drive the implementation of PlasticsEurope's "vision" of waste management to those countries in Europe with a promising window of opportunity. This implies high potential to develop recycling and improve recovery, readiness of relevant stakeholders such as government, waste operators, etc. to support at their given local infrastructure. The basis of PlasticsEurope's vision is the belief that we can only achieve materials and energy resource efficiency by diverting plastic waste from landfill via an eco-efficient mix of recycling and recovery.

This project is based upon intensive research into the current landscape across Europe, identifying best practice and the specific information and resource needs of each country. The results are already being rolled-out in the key countries France, Poland, Spain and the UK.

Ingo Sartorius

Project Manager

"Plastic waste is a valuable resource. PlasticsEurope's Knowledge Transfer Project will help ensure the potential of this resource is adequately exploited across Europe, reducing emissions and protecting the climate."

"Plastics manufacturers are doing all we can to ensure that we continue to maximise the benefits for society of this versatile material."

Plastics and society

We live in a plastics society. The versatility, cost-effectiveness and positive environmental profile of plastics have made them indispensible materials in our everyday lives. They form the essence of our homes, our cars, and the products that we buy. Plastics are the materials that make modern life possible.

Plastics make a significant contribution to societal health and well-being. They are essential materials used in a vast array of products that protect workers and consumers from harm.

Thanks to plastics, workers in many of the emergency services (fire fighters, surgical staff) are safer than they have ever been, while cutting-edge plastics are also enabling ever-greater advances in the equipment available to workers in pioneering fields such as space exploration. Closer to home, plastic packaging helps to protect consumers by keeping food fresh for longer, while certain types of plastic packaging have been developed that even allow consumers to monitor the deterioration of the food inside.

However the benefits of plastics go beyond the daily products we use to the essential infrastructure not necessarily visible. Plastics have helped drive important innovations in areas such as water decontamination and distribution, and will continue to play a key role in upgrading the facilities available to people all around the world.

Cutting-edge plastics are also enabling huge advances in sports and leisure technology. Plastics products are allowing both professional and amateur athletes to push the boundaries of their performance.

What's more, PlasticsEurope is investing significantly in educational projects to enhance the knowledge and skills of students and ensure a continuing supply of chemists and engineers with the ideas to inspire the next generation of plastic innovations.

Similarly, plastics manufacturers are working intensively to ensure that their products are completely safe for consumers, particularly with regard to plastics that come into contact with food.

In short, plastics save lives, enhance our enjoyment of leisure pursuits, and help deliver life-preserving commodities and services directly to consumers. Plastics manufacturers make sure to ensure that the benefits of this versatile material are maximised for society.

Protecting consumers, enhancing lives

Plastics in our homes

Plastics are integral to the buildings where we live and work. Plastic insulation conserves energy, plastic windows seal tight to keep warmth in and noise out, plastic pipes carry water and sewage to and from the building, plastic safety glass makes life difficult for burglars, and plastic floor covering brings comfort and hygiene into homes. Plastic membranes provide solutions to once-difficult challenges such as flat roofs, as they can adapt to all forms, are flexible and extremely hard-wearing. They offer a wide variety of design possibilities with only a small quantity of material and low weight.

Household products

Thanks to smart plastics engineering, the water consumption of modern washing machines is as low as never before. At the end of the 90's, washing machines used about 100 litres of water per washing cycle, modern machines and modern detergents have helped cut this figure to 50-60 litres. In 24 million households in France, which use their washing machines about 100 times a year, this improvement saves at least 950 million litres of valuable drinking water.

Innovative plastics applications are a crucial element in the ongoing trend for product miniaturisation. Today's products are made with less material while still achieving the same or even higher levels of functionality. Flexible printed boards are currently revolutionising the electronics industry. With a thickness of less than one millimeter they comprise several layers of flexible plastic carrier film with printed circuits. Their production protects resources, they are extremely lightweight, do not take up much room and can be adapted freely to suit any required design. Their thermal, electric and chemical properties are superior to those of separate functional layers used in applications such as mobile phones.

Essential infrastructure

Plastics pipes have been demonstrated to deliver superb performance in delivering water, both in the developing and developed worlds. Their smooth internal surface ensures enduring efficient water flow, reduces the energy required for pumping, and they do not pose the same risk of contamination as some alternative materials.

In urban situations, the combination of flexibility and availability in very long length coils means that plastic pipes can flex to avoid obstacles and other buried utilities without needing to use bends. In addition, plastic pipes allow modern trenchless techniques that are not practicable with other materials. Indeed, the majority of techniques to replace pipes are now trenchless. Plastic pipes present many benefits for the environment and for future generations.

These advantages have also been illustrated in London over recent years, where an ambitious programme of pipe renewal in London has been undertaken. More than 1400 people have been working for the replacement of more than 1770 Km of mains over the 2005-2010 period. Prior to the replacement programme, 30% of the water put through the network was lost to leakage. The London pipe replacement is estimated to save more than 30 millions litres of water each day.

However plastics aren't finished here. Special water soluble polymers deliver high-performance in water treatment industries and sea water desalination, maximising supplies of safe drinking water in areas of high water stress.

"Plastics pipes have been demonstrated to deliver superb performance in delivering water, both in the developing and developed worlds."

Geotextiles are another new application delivering significant benefits to society. Geotextiles are permeable fabrics which, when used in association with soil, have the ability to separate, filter, reinforce, protect, or drain. Their environmental benefit includes the prevention of soil erosion and filtering contaminated air and water. The French Mediterranean coast is being protected from parasite algae by a fabric containing an ion which is released upon contact with the algae, killing it without harming the environment. This same pollution-absorbent smart textile is also being used to remove radioactive elements from waste water in nuclear power plants.

Protective equipment

High-tech plastics make an enormous contribution to the protective performance of functional garments. They protect humans from fire, heat or cold, wind chill, UV rays, moisture, contamination and mechanical stress. They have an antimicrobial effect and are resistant to chemicals. Plastics are essential for body climate control concepts which rely on heat and moisture transfer to help the natural thermo-regulation processes. Astronauts, divers, blast furnace workers, fire fighters and skiers would be lost without plastics.

To give an example, a blast furnace worker faces operational temperatures of up to 1500 °C. In this environment, special protective clothing made from aluminium-coated plastics is essential.

Multi-functional aramid fibres have outstanding properties that protect the largest human organ, the skin, from burning and prevent heat or stress strokes. They are resistant to excessive heat and cold, self-extinguishing, have a high elongation at break, are resistant to high stress, cutting or abrasion. Aluminised aramid fibres are of the same weight as steel but can withstand 5 times higher temperatures. They can provide long-term protection against temperatures of up to 250 °C and short-term protection against exposure to temperatures of up to 700°C.

Sports equipment

Whether it be compounds in thermoplastic elastomer soles for running shoes or carbon fibre composites for rowing skiffs; polypropylene and elastomer masks and snorkels for divers or nylon runners for in-line skates; or space age composites for racing bikes, over the years, plastics have established themselves as the material which have revolutionised the sector.

Consumer safety

Plastics have become integral to patient safety across many vital medical applications. This is because they are easy to clean and sterilise and contain intrinsic barrier properties against fluids, gases and pollutants.

However new research is enabling plastics to make ever more sophisticated contributions to medicine. German researchers have worked with plastic electronics to develop new flat screens. Electrochromic substances that change colour in an electric field work to show colours and attractive lettering on plastic foil. This new technology is not just eye-catching, but could be particularly useful on medical packaging where it could display information in various languages at the touch of a button – potentially life-saving in emergency situations.

So-called 'smart textiles' are materials generally consisting of polymer-based fabrics designed to perform very sophisticated functions and usually incorporating high-tech elements into the fabric itself, such as biochemicals and photovoltaic cells. New technology developments include polymer light-emitting diodes (LEDs) for displays and packaging applications, and polymeric semiconductors for plastic electronic circuits. Personal health monitoring may become possible by incorporating sensors into clothes that measure and transmit vital information, such as blood pressure. In this way, smart textiles could hold the possibility to transform the lives of people suffering from chronic disorders, including cardiovascular and respiratory diseases, by detecting warning signs early and regardless of the wearer's location.

PlasticsEurope projects

Food contact

Plastics manufacturers are highly aware of the need to ensure the highest levels of consumer safety in sensitive applications for our material, such as where they are in contact with food. As part of this process, PlasticsEurope works closely with the European Commission and other regulatory bodies to ensure that judgements about safety are based on consistent, rational processes that reflect the actual risks involved.

With this in mind, PlasticsEurope, together with its partners in the plastics value chain, successfully tendered to become involved in the EU-led FACET project. As part of this process, PlasticsEurope promotes risk assessment based on exposure rather than on intrinsic hazard.

This process has the potential to deliver important progress. The plastics industry has been working constructively for many years on European regulation for materials that come into contact with food. Since the adoption of the Framework Regulation on materials intended to come into contact with food, covering all materials and outlining a list of seventeen materials which could be covered by specific measures, only plastics have been regulated to a great extent. To continuously guarantee consumer's safety and balanced legislative requirements in this area, PlasticsEurope is committed to working with its partners to make this project a success.

Anne-Marie Hamelton

Project Manager

"Consumer safety remains PlasticsEurope's number one priority, and we welcome this new approach based on understanding the risks consumers actually face and protecting them accordingly."

Hans Feldmeir

Teacher

"I would like to encourage PlasticsEurope to continue on this education path."

Youth education

PlasticsEurope believes passionately in equipping Europe's youth with the knowledge and skills they need to help solve the complex challenges facing the modern world. Science education is particularly crucial in enabling students to understand the causes, consequences and potential solutions to these challenges.

PlasticsEurope operates a range of youth education projects covering all European countries. Based on a strong scientific foundation, these projects help to raise student awareness of these challenges and demonstrate the role of plastics as a contributor to some of the solutions.

These projects have empowered students to challenge some of the embedded assumptions about plastics in society, and form their own views based on an appreciation of the benefits of the material.

FuturEnergia

This well-established online educational programme has been running annually since 2007 as a partnership between PlasticsEurope and the not-for-profit educational consortium EUN (European SchoolNet).

This project, a partner to the European Commission's Sustainable Energy Europe programme, provides a diverse range of tasks and competitions to reach out to students across Europe.

Žan Žveplan

Winner, 2008 European Youth Parliament Debate Final

"Our generation will have to solve climate change and global warming problems, so bringing so many of us together to debate the solutions is a great idea. Plastics have a big role to play in helping to reduce oil consumption."

The competitions to date, accessed by teachers and students via the FuturEnergia website, have included a challenge to create a comic strip character with special powers to save energy and resources, with the results being made into an actual comic strip by a professional artist and projects to identify energy saving ideas from the youngsters.

The ever-popular online internet ''chats" element of the programme, has featured participation by individuals as diverse as Friends of the Earth's Head of Campaigns, a former Olympic gold-medallist in canoeing, Industry captains, Futurologist, the EU's Energy Commissioner Piebalgs or well-know University professors such as Prof. Dharmadassa (Sheffield University) and Prof. McDonald (University of Reading).

The FuturEnergia awards ceremonies, organised to celebrated the achievements of the most outstanding youngsters, are organised each year in the European Parliament or the European Commission, with patrons such as EU Commissioner for Education Jan Figel' and MEPs such as Holger Krahmer, Angelika Niebler or Edite Estrela. These high profile events usually bring together students from a range of European countries in Brussels to meet EU policy-makers working on these important issues.

Youth Parliament Debates

Starting in 2007, PlasticsEurope launched a series of European national youth debates, each time gathering around 100 students to debate the pros and cons of plastics when it comes to energy efficiency and climate protection. PlasticsEurope's objective is to provide youth with a democratic forum to freely debate the pros and cons of different options and the industry's product.

These debates are intensive activities that require students to use their scientific knowledge and rhetorical skills to make a case for or against the proposition at hand.

Focusing on the broad topic of "The global climate crisis: are plastics part of the problem or part of the solution?", the debates have brought together students to discuss the merits of plastics in protecting the climate.

The winning students from each of the national debates each year have gone forward to a European final. The first Grand European Final was held in the European Parliament in Brussels in October 2008 under the patronage of the Parliament's President Hans-Gert Pöttering with pro- and con-speeches from renowned futurologist Ray Hammond and journalist David Gow of the Guardian.

The 2009 European final was held in Rome on 13 November in the Parlamentino of "Villa Borghese" in Rome. On this occasion Italian astronaut and former MEP Umberto Guidoni took the role of the con speaker, while the opening address for the pro faction group being given by Thomas Schmidt, a plastics engineer at MT Aerospace and former German Olympic gold medallist in canoeing.

Plastics and the economy

The plastics industry's annual report on the production, demand and recovery of plastics demonstrates the vital role plastics play across all dimensions of sustainable development – social, environmental, and economic.

Latest key trends include:

- Increase in recycling and energy recovery of post-consumer plastics
- Reduction in volumes of plastics going to landfill
- Continuation of the EU-27 trade surplus for plastics
- Severe impact of the economic crisis on production and demand for plastics

The plastics industry: weathering the storm

The plastics industry (polymer producers – represented by PlasticsEurope, converters – represented by EuPC, and machine manufacturers – represented by EUMEPS) within the EU27 provide direct employment to 1.6 million people, and indirect employment to many times more in industries which are enabled by or depend upon plastics for their products.

In addition, the plastics industry adds significant wealth to the EU27 by exporting more in value terms than is being imported from outside the EU27. The EU27 is therefore a net exporter of both primary plastics and converted plastics products.

"In 2008 the plastics industry created a EU27 trade surplus with non-EU countries worth € 13 billion."

Figure 1 shows the EU27 export, import and net export of primary plastics (SITC 57) from 2002 up to mid-2009 with non-EU countries. In 2008 the net export amounted to 6.8 million tonnes with a value of about €8.7 billion. The corresponding development for converted plastic products (SITC 58) is shown in figure 8, and demonstrates a net export of 1.2 million tonnes with a value of €4.4 billion.

In 2008 the plastics industry created a EU27 trade surplus with non-EU countries worth €13 billion. The trend for both primary plastics and the converted plastics products was down during the fourth quarter 2008, reflecting the beginning of the global recession which has hit the EU27 plastics industry extremely heavily. This deterioration has started, however, to be reversed in 2009.

Since 2002 the surplus has increased steadily, as shown by Figure 2, whilst the total EU industry net trade has shown a growing deficit.

Production and demand

Europe produces 60 million tonnes of plastics per year, representing 25% of the global plastics production, slightly ahead of NAFTA (23%). Plastic production facilities are well placed across Europe. Germany is the major producer, accounting for 7.5% of global production, followed by the Benelux (4.5%), France (3%), Italy (2%), and the UK and Spain (1.5%).

Plastics demand by converters in Europe was 48.5 million tonnes in 2008. The major countries are Germany and Italy, together accounting for around 40% of the European conversion to plastic products. Of the new Member States, Poland has the highest plastic conversion rate with 2.55 million tonnes/y of the European total, followed by the Czech Republic at 1.05 million tonnes/y and Hungary at 0.84 million tonnes/y. The converting industries in many of the new Member States are expected to grow strongly in the coming years.

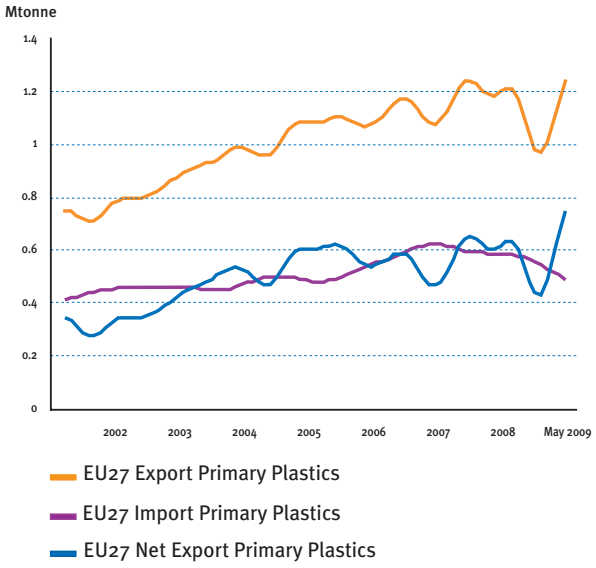


Figure 1. EU27-Trade with Primary Plastics (SITC 57) with non-EU Countries (Extra EU), trend cycle

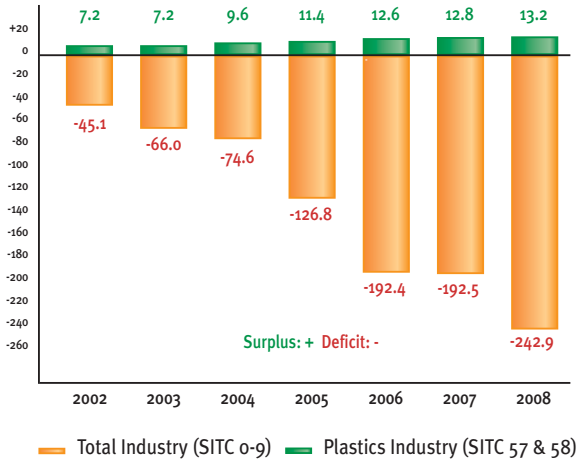


Figure 2. EU27-Trade Balance with non-EU Countries (Extra EU) Total Industry (SITC 0-9) compared to the Plastics Industry (SITC 57 & 58) in billion €

Plastics too valuable to throw away

Diversion from landfill

In 2008, waste generation increased by just under 1%, but both recycling and energy recovery increased, driving the total recovery rate for plastics up to 51.3% and disposal to landfill down to 48.7%, thereby opening up a gap of 2.6%. Despite this, 12.2 million tonnes of plastic waste was still wasted in landfill sites.

Seven of the EU Member States plus Norway and Switzerland already recover more than 80% of their used plastics. Figures show that particularly Switzerland, Germany, Sweden and Denmark have almost completed their full diversion-from-landfill strategy. The secret of their success is the adoption of an integrated resource management strategy, which uses a range of complementary options addressing different waste streams with the best environmental and economic option for each one.

For other countries, progress in diversion from landfill is, on average, slow. Significant efforts are necessary in many Member States if they are to maximise the full potential of a diversion from landfill strategy (e.g. GHG emission savings, enhanced resource efficiency and energy security and avoiding landfill penalties).

Figure 3 shows that countries with high recovery rates score highly on both recycling and energy recovery. This means that a strategy which includes energy recovery is not contradictory to achieving good recycling results. It also shows that whilst recycling performance is similar across most of the European countries, there are big differences in the utilisation of energy recovery processes.

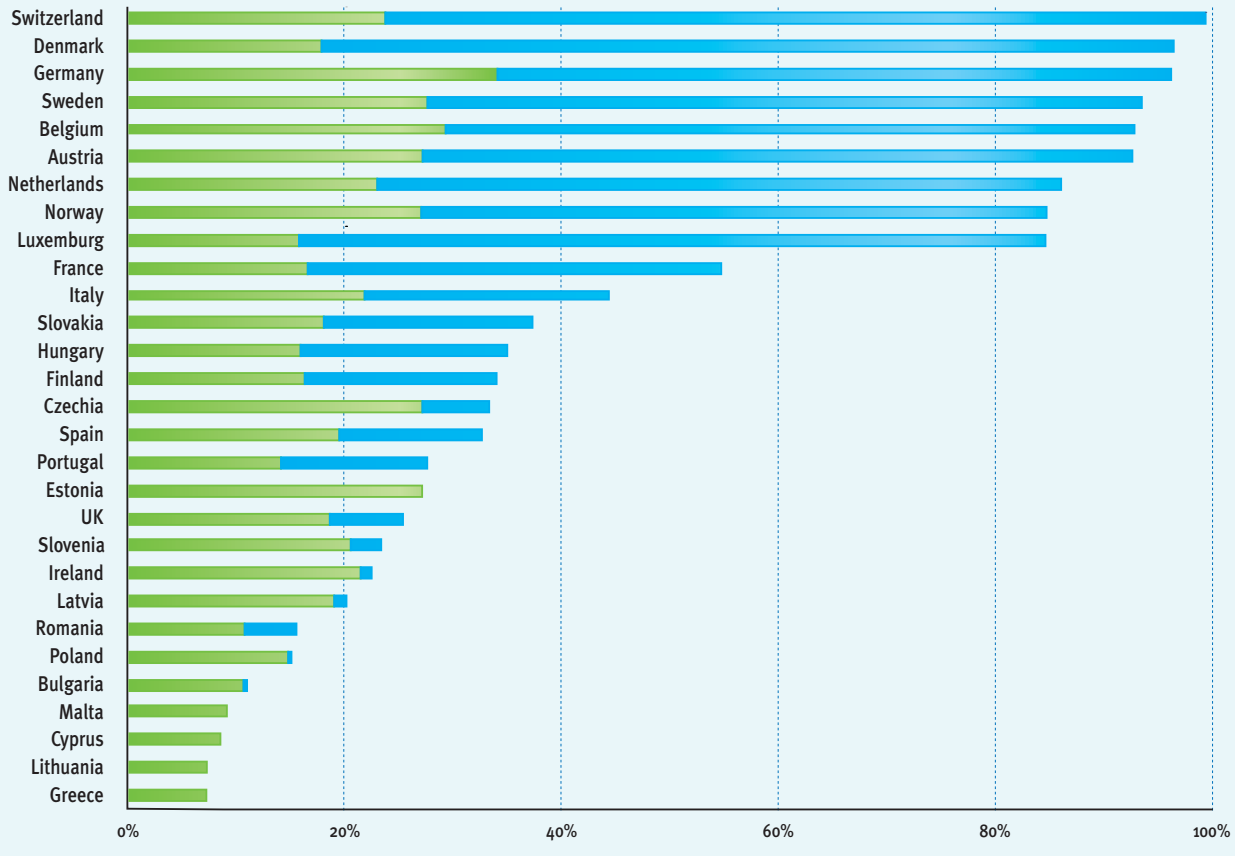


Figure 3. Recycling and energy recovery rate per country

Recycling

Recycling across Europe increased from 20.4% in 2007 to 21.3% in 2008. This is a smaller increase than in earlier years, reflecting the severe impact of the economic crisis on this sector due the decrease in recyclate prices.

Energy recovery

Energy recovery increased from 29.2% in 2007 to 30% in 2008. Today, about 420 plants treat 64 million tonnes of municipal, commercial and industrial waste every year to produce electricity for 7 million households and heat for 13.4 million households. This also reduces CO_2 emissions by 23 million tonnes per year.

The EU member states demonstrate very different "Energy-from-Waste" (EfW) footprints and can be divided into three groups:

- Strong position for Energy-from-Waste (EfW): Austria, Belgium, Denmark, Germany, the Netherlands, Sweden and Switzerland have demand and supply in balance and use EfW extensively.
- EfW can be expanded: Ireland, Italy, France, Portugal and Spain offer opportunities for growth but also market barriers.
- Major growth potential: Czech Republic, Greece, Poland and the UK all offer major growth opportunities which require significant investments.

The EfW route is technically, environmentally and economically fully-proven. If Europe were to exploit the full potential of the residual waste stream using EfW technology it would be possible to bring electricity to 17 million households and heat to 24 million households.

Jan-Erik Johansson

"In spite of the economic downturn, progress continues to be made in recapturing the value of used plastics. Diversion from landfill is a crucial tool to reduce greenhouse gas emissions and enhance the European economy."

Example Denmark

Denmark has the highest per capita production of both power and heat from EfW plants in Europe. The 30 EfW plants use 3.5 million tonnes of waste per year to produce the equivalent of 5% of the national electricity need and 20% of the heat need. The district heating system today covers 53% of the heating market. This figure is set to increase to 70% by 2030 through the increase of the amount of waste treated in EfW plants to between 4.5 and 5 million tonnes/y.


PHILIPS

"PlasticsEurope aims to help coordinate a responsible contribution to society by the industry."

PlasticsEurope – How we work

Our mission

PlasticsEurope aims to help coordinate a responsible contribution to society by the industry and ensure that the vital role that plastics can play in meeting society's needs is understood and not unwittingly compromised.

A number of strands of activity are at the core of our approach:

- Develop scientific studies aiming at investigating the impact of plastics on the environment, and on health and safety of workers and consumers
- Working with policy-makers and regulators to ensure a sensible and balanced legislative environment
- Collaborating with our value chain and other stakeholders to raise understanding and awareness of plastics as enablers of safe, resource-efficient products and processes
- Generating the data that provide the environmental fingerprints – the so-called eco-profiles – of more than 70 polymers and their intermediates

Our organisation

PlasticsEurope's governing body is the General Assembly, made up of our member companies. The association is managed by a Steering Board, an Executive Director and a Leadership Team. The Steering Board itself is supported by Regional Advisory Boards and Programme Steering Groups.

The Leadership Team is the operational centre of the organisation, responsible for proposing, driving projects and ensuring delivery. It is headed by the Executive Director and includes the Deputy Executive Director in charge of Advocacy and Communications, The Consumer and Environmental Affairs Director, The Finance Director and the Regional Directors for the five geographic regions where we operate (Central, Iberia, Mediterranean, North and West).

Beneath the Leadership Team our advocacy, communications and technical specialists work closely with member companies through Product Groups for specific polymer types, Working Groups and Standing Committees to focus on key social, environmental and market issues.

The Regional Advisory Boards ensure the needs of individual countries are reflected in the overall European approach. Programme Steering Groups give advice on the development and implementation of projects, with a particular focus on business impact and relevance.

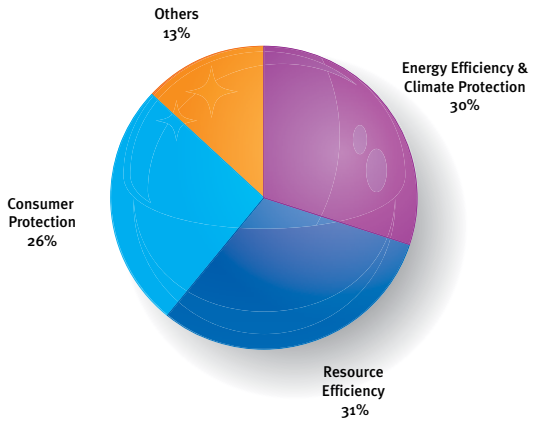


Figure 4. Overall external cost € 3.690 Million

Our priorities

To ensure our activities are focused appropriately on meeting the complex global challenges that we face, PlasticsEurope has identified three Programmes addressing key areas of societal concern:

- Energy Efficiency and Climate Protection
- Resource Efficiency
- Consumer Protection

Our organisation's investment of resources reflects these focus areas. In this way, we are able to ensure that we take a balanced approach that covers all aspects of sustainable development, and that our activities really have an impact on the issues that matter most.

Membership

AGC CHEMICALS EUROPE
ANWIL
ARKEMA
BASELL ORLEN POLYOLEFINS SP. Z O.O.
BASF
BAYER MATERIALSCIENCE
BOREALIS
BORSODCHEM
CYTEC
DOW EUROPE
DSM ENGINEERING PLASTICS
DUPONT DE NEMOURS INTERNATIONAL
DYNEON
EASTMAN CHEMICAL
EMS-CHEMIE
EQUIPOLYMERS
ERCROS
EVAL EUROPE
EVONIK DEGUSSA
EXXONMOBIL CHEMICAL EUROPE
GABRIEL TECHNOLOGIE
HUNTSMAN ADVANCED MATERIALS
INEOS
INEOS NOVA INTERNATIONAL
JACKON
LEUNA-HARZE
LVM
LYONDELLBASELL
MONOTEZ
NOVACKE CHEMICKE ZAVODY
NOVAMONT
OLTCHIM
POLIMERI EUROPA
POLYONE
REPSOL YPF
RHODIA
SABIC EUROPE
SABIC INNOVATIVE PLASTICS
SHELL CHEMICALS EUROPE
SHIN ETSU
SOLVAY
SPOLANA
SPOLCHEMIE
STYROCHEM FINLAND
SUNPOR KUNSTSTOFF
SYNBRA TECHNOLOGY
SYNTHOS
TICONA
TOTAL PETROCHEMICALS
UNIPOL
VESTOLIT
VINNOLIT
WACKER CHEMIE
ZAKLADY CHEMICZNE “ORGANIKA - SARZYNA”

PlasticsEurope Steering Board

President

Jacques van Rijckevorsel
SOLVAY – Member of the Executive Committee
– Group General Manager of the Plastics Sector

Vice-Presidents

Anton de Vries
LYONDELLBASELL INDUSTRIES – Senior Vice President, Olefins and Polyolefins - Europe, Asia and International
Günter Hilken
BAYER MATERIALSCIENCE – Member of the Executive Committee, General Manager Business Unit Polycarbonates
Martin Pugh
INEOS NOVA INTERNATIONAL – Managing Director, Europe

Treasurer

Günter Hilken
BAYER MATERIALSCIENCE – Member of the Executive Committee, General Manager Business Unit Polycarbonates

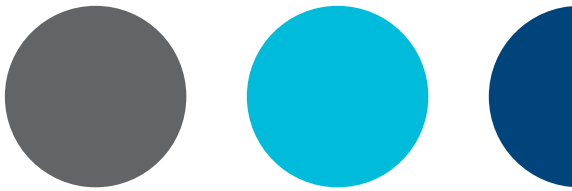
Members

Paul Augustowski
BASELL ORLEN POLYOLEFINS – President and CEO
Jacques Delmoitez
BASF POLYURETHANES – President
Lorenzo Delorenzi
BOREALIS – Executive Vice President, Polyolefins
Josef Ertl
VINNOLIT – CEO
André Genton
HUNTSMAN ADVANCED MATERIALS – President
Esteban Gimeno
REPSOL CHEMICALS – Business Unit Director Polyolefins
Mauro Gregorio*
DOW EUROPE IMEA – Senior Vice President, Olefins and Polyolefins - Europe, Asia and International
Arno Knebelkamp
VESTOLIT – CEO
Huub Meessen
SABIC – Vice President Europe
Massimo Paravidino
POLIMERI EUROPA – Vice President Business Strategy
Bill Reid
INEOS Olefins & Polymers Europe – Business Director
Carl Van Camp
TOTAL PETROCHEMICALS – Senior Vice-President, Head of Polyolefins Division
John R Verity
EXXONMOBIL CHEMICAL COMPANY – Vice President, Polyolefins

* Pending election by the General Assembly 2010

Status April 2010

Product groups



Product groups manage issues related to some of the polymers. Each have their specific topics and work programmes which may vary from working on standardisation, eco-labels, preparing for REACH, developing safety guidelines or addressing regulations that impact their products.

In addition, Product groups provide general and technical expertise for discussions with their respective regulators and value chains. Product groups are also actively engaged in advocacy and communications related to the promotion, defence and benefits of their plastics.

Bio-based & biodegradable Plastics

Chair: C. Bastioli, NOVAMONT
Co-Chair: J. Hamprecht, BASF and H. Leitner, ECVM
Member companies: ARKEMA, BASF, DOW EUROPE, DSM ENGINEERING PLASTICS, DUPONT DE NEMOURS DEUTSCHLAND, DUPONT DE NEMOURS INTERNATIONAL, EXXONMOBIL CHEMICAL EUROPE, LYONDELLBASELL INDUSTRIES, NOVAMONT, POLIMERI EUROPA, REPSOL YPF, SOLVIN, TICONA, TOTAL PETROCHEMICALS

Engineering Thermoplastics

Chair: M. Koch, DSM
Member companies: ARKEMA, BASF, BAYER MATERIALSCIENCE, DOW EUROPE, DSM ENGINEERING PLASTICS, DUPONT DE NEMOURS INTERNATIONAL, EVONIK RÖHM, LANXESS, RHODIA POLYAMIDE, SOLVAY, TICONA, ZAKLADY AZOTOWE & TARNOWIE MOSCISKACH

Epoxy Resins

Chair: M. Schneiter, HUNTSMAN ADVANCED MATERIALS
Member companies: CYTEC, DOW EUROPE, EMS-CHEMIE, HUNTSMAN ADVANCED MATERIALS, LEUNA-HARZE, SIR INDUSTRIALE, SPOLCHEMIE, ZAKLADY CHEMICZNE “ORGANIKA – SARZYNA”

Fluoropolymers

Chair: G. Malinverno, SOLVAY
Member companies: AGC CHEMICALS EUROPE, ARKEMA, DUPONT DE NEMOURS INTERNATIONAL, DYNEON, SOLVAY SOLEXIS

PC BPA

Chair: B. Richter, BAYER MATERIALSCIENCE
Member companies: BAYER MATERIALSCIENCE, DOW EUROPE, SABIC INNOVATIVE PLASTICS

Polyolefins

Chair: E. Hogenboom, SABIC EUROPE
Deputy Chair: M. Saurin, DOW EUROPE
Member companies: BOREALIS, DOW EUROPE, EXXONMOBIL CHEMICAL EUROPE, INEOS POLYOLEFINS, LYONDELLBASELL INDUSTRIES, POLIMERI EUROPA, REPSOL YPF, SABIC EUROPE, TOTAL PETROCHEMICALS

Vinyls/ECVM

The Vinyls Committee is the Board of the European Council of Vinyl Manufacturers, which represents the European PVC producing companies.

ECVM is also a partner in Vinyl 2010, the voluntary commitment of the PVC industry, which has been recognised by UNEP as a partnership for sustainable development.

Chair: A Reed, INEOS VINYLS
Member companies: ANWIL, ARKEMA, BORSODCHEM, ERCROS, INEOS, LVM, NOVACKE CHEMICKE ZAVODY, OLTCHIM, SHIN ETSU, SOLVIN, SPOLANA, VESTOLIT, VINNOLIT

ABS/SAN

Chair: S.Oepen, BASF
Member companies: BASF, DOW EUROPE, INEOS ABS, POLIMERI EUROPA, SABIC INNOVATIVE PLASTICS

Expandable Polystyrene

Chair: P. Ayrey, INEOS NOVA INTERNATIONAL
Deputy chair: J. Fischer, BASF
Member companies: BASF, DOW EUROPE, GABRIEL TECHNOLOGIE, INEOS NOVA, JACKON, MONOTEZ, POLIMERI EUROPA, REPSOL YPF, STYROCHEM FINLAND, SUNPOR KUNSTSTOFF, SYNBRA TECHNOLOGY, SYNTHOS, UNIPOL

Polystyrene

Chair: T. Kervyn, TOTAL PETROCHEMICALS
Member companies: BASF, DOW EUROPE, INEOS NOVA INTERNATIONAL, POLIMERI EUROPA, SYNTHOS, TOTAL PETROCHEMICALS

Working groups

PlasticsEurope working groups work together on the basis of an annually agreed plan to position plastics as the material of choice in technical applications by demonstrating their technological, ecological, social (= consumers) and economic benefits. Group members are PlasticsEurope experts and representatives of member companies.

Life Cycle Task Force

PlasticsEurope is in a leading position in the world of LCA as it is the trustworthy source of information for all stakeholders. PlasticsEurope is the supplier of LCI data for plastics and its intermediates to the EU LCA Platform operated by the European Commission Joint Research Centre (JRC). The aim of this Platform is to provide a standardized toolbox for life cycle supported policy making towards sustainability.

PlasticsEurope's' websites provides Environmental Product Declarations (EPD's) for most of the commodity plastics. These EPD's will be used more and more in B2B communication.

PlasticsEurope is also undertaking the review of the methodology protocol we use to make our Eco-profiles and EPD's. In a workshop held in September, we received comments from academia, "colleague" plastics associations in the US and Australia, and from the EU JRC. After two more consultations rounds, the LCTF approved the new Methodology Protocol for release to our website. This Methodology Protocol will be used as the basis for a globally harmonized protocol which status we hope to achieve in 2010. Another very important development is the interest shown by the JRC to add this Protocol as a separate chapter in the ILCD (International Reference Life Cycle Data System) Handbook.

Last but not least it needs to be mentioned that our Eco-profiles and EPD's form the fundament for the project proposals made by the Industry Action Team "Climate Protection & Energy Efficiency" (CPEE IAT) on the carbon balance of our industry and the Eco-footprint methodology.

Chair: E. Streich, DOW DEUTSCHLAND
Member companies: BASF, BAYER MATERIALSCIENCE, BOREALIS, DOW DEUTSCHLAND, EVAL EUROPE, INEOS POLYOLEFINS, NOVAMONT, SABIC EUROPE, SOLVAY, TOTAL PETROCHEMICALS, VINNOLIT

Packaging & Litter Working Group

In 2007, the main themes addressed by the Packaging & Litter Working Group were carbon footprints and marine litter. With regard to marine litter, the Packaging & Litter Working Group developed, together with the Global Litter Team (a global network of plastics associations), a common framework to enable a consistent and successful approach to dealing with marine litter. This Working Group also developed, in cooperation with an external consultant, a position paper on carbon footprints. This paper was supported by the aluminium industry and has been widely shared with other industries along the value chain. In 2008, the Packaging & Litter Working Group created a carbon footprint advocacy and communication strategy with other partners in the value chain.

Chair: C. Marchand, TOTAL PETROCHEMICALS
Member companies: BASF, BOREALIS, DOW EUROPE, EVAL EUROPE, EXXONMOBIL CHEMICAL EUROPE, LYONDELLBASELL INDUSTRIES, SABIC EUROPE, TOTAL PETROCHEMICALS

Technical Applications & Recovery Working Group (TARG)

The Technical Applications and Recovery Group (TARG) is primarily responsible for providing technical and advocacy support in the field of waste management.

In keeping with the PlasticsEurope priority focus areas, TARG aims to be the prime source of scientific information within PlasticsEurope on Energy Efficiency and Climate Protection, and Resource Efficiency. In this capacity, it reviews annual statistics relating to plastics production, consumption and product end-of-life. TARG also monitors and actively contributes to EU regulatory processes.

TARG has completed a major project on the benefits of burning wood-based biofuels and Solid Recovered Fuels (SRF) together: results show that this is an environmentally sound and economically attractive way of producing energy, and an intelligent way to combine renewable energy use with sustainable waste management. This project was one in a long series of technical projects conducted by PlasticsEurope, exemplifying the responsible approach it has taken to finding sound and economically viable end-of-life solutions.

Chair: K. Wittstock, BASF
Member companies: BASF, BOREALIS, DSM ENGINEERING PLASTICS, DUPONT DE NEMOURS INTERNATIONAL, EVAL EUROPE, LYONDELLBASELL INDUSTRIES, RHODIA, SABIC EUROPE, SABIC INNOVATIVE PLASTICS, SOLVIN, TOTAL PETROCHEMICALS, VESTOLIT

Eco-label & Green Public Procurement Working Group

This Working Group aims to ensure that Eco-Label and GPP regulatory decisions are taken based on scientific facts. We work in close collaboration with our value chain to generate and communicate the facts needed to educate the relevant stakeholders.

Chair: D. Van hessche, PLASTICSEUROPE
Member companies: ALBEMARLE EUROPE, BASF, BAYER MATERIALSCIENCE, DOW BENELUX, INEOS VINYLS, LYONDELLBASELL INDUSTRIES, POLYCOMPLY HOECHST, SOLVAY, TOTAL PETROCHEMICALS, VINNOLIT

European Global Automotive Stakeholders Group

The Global Automotive Stakeholders Group is a global value chain activity aiming to facilitate communication and exchange of information regarding the use of certain substances in automotive products throughout the supply chain; PlasticsEurope is the host of the European section of this global initiative. With REACH coming on board it is the ideal platform to provide information to downstream users.

The GASG released on the 1st of February the version of the Global Automotive Disclosed Substances List (GADSL). The list can be viewed and downloaded using the following link: http://gadsl.org/. New in the 2010 release are the relevant substances of the updated REACH candidate lists.

The GADSL is the result of a year-long effort of representatives from the automotive, automotive parts supplier (tier supplier) and chemical/plastics industries in EU, USA and Japan.

Chair: G. Klotz, CEFIC
C**o-Chair:** C. Bauspiess, DAIMLER
Participating Companies and associations: ADAM OPEL, ALBEMARLE EUROPE, AMERICAN CHEMISTRY COUNCIL (PLASTICS DIVISION), ASD (AEROSPACE AND DEFENCE INDUSTRIES ASSOCIATION OF EUROPE), AUDI, BASF, BASF AKTIENGESELLSCHAFT, BAYER MATERIALSCIENCE, BMW, BOREALIS KALLO, CEFIC, CHEVRON ORONITE TECHNOLOGY, CLEPA, DAIMLER, DOW BENELUX, DUPONT DE NEMOURS INTERNATIONAL, DUPONT PERFORMANCE COATINGS, ECPI, EPCOS, ETRMA, ETRMA, EUPC, EUROPEAN OWENS-CORNING FIBERGLAS, EVAL EUROPE, EXXONMOBIL CHEMICAL FRANCE, FEDERPLAST, FIAT AUTO, FORD MOTOR COMPANY, GENERAL MOTORS CORPORATION, HENKEL KGAA, HYUNDAI MOTOR EUROPE TECHNICAL CENTER, IZA-EUROPE (INTERNATIONAL ZINC ASSOCIATION), JAPAN CHEMICAL INDUSTRY ASSOCIATION, JOHNSON CONTROLS TRENCIN, KLUBER, KOLJA SERVICES, NRL CONSULTING, PSA PEUGEOT CITROEN, RENAULT, ROBERT BOSCH, SABIC EUROPE, TOYOTA MOTOR EUROPE, TREVES, VOLVO CAR CORPORATION

Standardization Working Group (SWG)

From a Standardization point of view 2009 has been characterized by an increasing influence of Asiatic countries. Presence of Asia is increasing at global standardization level (ISO, IEC and ETSI). There is a higher presence of experts from Asian countries in different standardization bodies at any level, from Technical Committees to working groups. Beside this, there is a bigger demand of these countries to participate in the decision making process. In fact at last international standardization congress on plastics, held in Rome in November, some Asiatic countries applied to hold some WG's Secretariats. The same has happened when USA relinquished on ISO TC 61 Secretariat and China applied for it.

Beside this tendency, there is a growing interest in the standardization arena to consider environmental aspects in standards, not only in those having a general scope like, e.g., environmental conscious design, but also in product standards.

Within this landscape SWG efforts aimed to preserve and even improve the necessary European presence in International standardization.

Our challenge for next year is to further align Standardization efforts with the PlasticsEurope Structure and improve coordination with Product Groups and Standing Committees as well as the main functions: advocacy, communication and technical.

Chair: J. Ruiz, PLASTICSEUROPE
Member companies: BASF, BASF ESPANOLA, BAYER, BAYER INDUSTRY SERVICES, BAYER MATERIALSCIENCE, BNPP, BOREALIS, CHEMOPETROL, DOW CHEMICAL, DOW DEUTSCHLAND, DSM, DSM ENGINEERING PLASTICS, ELASTOGRAN, EVAL EUROPE, HUNTSMAN POLYURETHANES, INEOS POLYOLEFINS, INEOS VINYLS ITALIA, LYONDELLBASELL INDUSTRIES, POLIMERI EUROPA, RHODIA SERVICE, SABIC INNOVATIVE PLASTICS, SOLVAY, SOLVIN, SUNPOR KUNSTSTOFF, TOTAL PETROCHEMICALS

Standing committees

PlasticsEurope Market Research & Statistics Standing Committee (PEMRG)

The PlasticsEurope Market Research Group (PEMRG) pools the market intelligence of PlasticsEurope's members with the aim of creating a complete, harmonised and comprehensive description of the worldwide plastics market. Its main focus is to analyse the plastics market within Europe (EU 27) on a country level by selected products and applications.

PEMRG's mission is to enable PlasticsEurope to speak authoritatively with one voice and moreover to underline the significant benefits of plastics and the impact of our industry on the economy.

Furthermore, the group is engaged in the collection of post-consumer plastics waste and recovery data.

Chair: F. Schnieders, BAYER MATERIALSCIENCE
Member companies: BASELL, BAYER MATERIALSCIENCE, BOREALIS, DOW EUROPE, DSM ENGINEERING PLASTICS, LANXESS, LYONDELLBASELL INDUSTRIES, POLIMERI EUROPA, REPSOL YPF, RHODIA, SABIC EUROPE, TICONA, TOTAL PETROCHEMICALS

Fire Safety Standing Committee

As plastics are basically combustible, fire safety will always be a standing issue for the plastics industry, making the work of this committee particularly important. In 2008, the committee worked towards developing EU-wide industry standards and regulations through advocacy and communication projects, and by providing technical information. Our biggest challenge was to convert highly technical information into communication tools that non-experts could understand. We achieved our goals largely thanks to contributions from industry experts of our member companies. For the coming years, we have two main goals. Firstly, start promoting the use of Fire Statistics to avoid regulatory decision making based on perception and secondly, advocate for Fire Safety Engineering tools that provide a more relevant way of assessing the fire safety of plastics products.

We remain vigilant to any unfair national regulatory initiative at the detriment of plastics products.

Chair: R. Dewitt, SOLVAY
Deputy chair: C. Lukas, DOW EUROPE
Member Companies: BASF, BAYER, CLARIANT, DOW CHEMICAL, DUPONT DE NEMOURS INTERNATIONAL, EASTMAN CHEMICAL HUNTSMAN POLYURETHANES, INEOS VINYLS, RHODIA POLYAMIDE, SABIC INNOVATIVE PLASTICS, SOLVAY

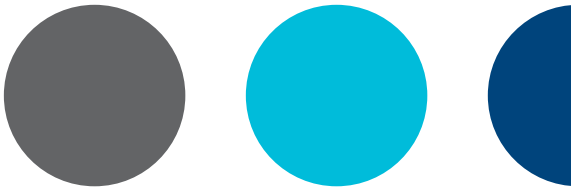
Food Contact Standing Committee

Key activity in 2008 was on the EU Commission's proposals for a recast of the current food contact legislation. The Committee provided input together with the other industry partners in the plastics value chain (additive producers, converters and flexible film manufacturers). The major concern was on the newly proposed test methods for plastics in contact with food. The draft recast regulation is foreseen in autumn 2009, with possible publication from mid 2010 onwards.

Furthermore, the Food Contact Standing Committee presented its matrix project on migration of non-intentionally added substances to food to the European Commission and to a number of Member States and it is generally recognized that industry will use this tool for its record-keeping obligations under the current food contact legislation.

Another activity of the Committee was to give input to the development of an EU database detailing the effects of chemical exposure on food packaging materials.

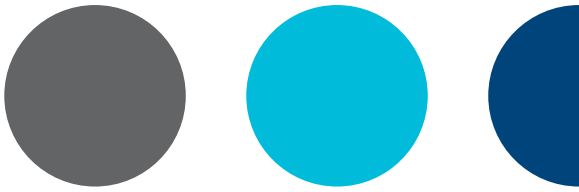
Chair: C. Dequatre, INEOS POLYOLEFINS
Deputy chair: R. Eisert, BASF



PlasticsEurope Leadership Team

(from top left to bottom right)

Wilfried Haensel	Executive Director
Jean-Pierre De Grève	Deputy Executive Director Advocacy and Communications Director
Francisco Cimadevila	Regional Director - Iberica Region
Patrick d'Hose	Finances & Administration Director
Jan-Erik Johansson	Regional Director - North Region
Michel Loubry	Regional Director - West Region
Peter Orth	Regional Director - Central Region
Michael Poulsen	Consumer & Environmental Affairs Director
Giuseppe Riva	Regional Director - Mediterranean Region



To learn more about PlasticsEurope, please consult our website:
www.plasticseurope.org

2010

2010-04

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