

Annual Report | Plastics on the Move

"If plastics did not exist, they would have to be invented"

Foreword: *Leading Change*

Until May 2004, APME (the Association of Plastic Manufacturers in Europe) was the representative voice of the plastics manufacturing industry in Brussels. What has changed?



The answer is Europe. Over the past year, 10 new member states have joined the European Union and several more are preparing to join as democracy and the market economy continue to spread in our part of the world.

As an innovation-driven industry, we felt we needed to anticipate those changes. The creation of *PlasticsEurope* therefore is much more than a name change.

What has happened is that we have merged six professional associations active in Europe's plastics producing industry into one new, networked entity. This was a radical change, which would have been impossible without the foresight, imagination and hard work of my distinguished predecessor, Dr. Werner Prätorius of BASF.

PlasticsEurope is now a collaborative organisation where regional offices work together towards a common goal. We can already see the benefits of this new approach through enhanced visibility, coordinated communications and greater advocacy consistency at European, regional and national level.

As manufacturers of essential high-tech materials, we intend to remain ahead of the field in representing our members' interests in a wider, increasingly diverse Europe. In addition to a growing number of contacts in the member states, plastics manufacturers in Turkey, a country moving closer to the EU, are already part of our organisation.

Many other European industrial and professional associations are starting to follow the same path, widening their scope but also strengthening their resources and services to their members. We are confident that deeper and wider is the way to go. We're not afraid of change.

Change, after all, characterises our industry. In recent months, we've had to cope with some dramatic swings in business conditions. The year 2004 was a remarkable year for our industry, marked by strong, worldwide demand for our products but also by surging raw material costs.

Our industry must continuously adapt to new conditions. Ongoing restructuring bears witness to this.

Plastics were intrinsically linked to many technology-driven developments during the past 12 months. A few examples illustrated in this report are the launch of the new Airbus jumbo jetliner, major advances in fuel cell-powered transport, achievements in sports of all kinds, trendy new electronic gizmos and evermore convenient packaging for consumer goods.

The *PlasticsEurope* organisation, like our products, is light, strong, flexible and resource-efficient. We have little doubt that plastics will prove to be the material of choice for the 21st century.

John Taylor
President *PlasticsEurope*
CEO Borealis A/S

On a Diet

2004 Saw the final assembly of the Airbus A380, the largest aircraft ever built. Plastics played a vital role in the plane's weight reduction programme



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iPodularity

2004 Saw the real breakthrough of MP3 players with the iconic iPod as flagship. Plastics play a crucial part in the development of both the electronics and the shell



P l a s t i c s

Plastics for innovation

Necessity is the mother of invention.

The first fully synthetic plastic, Bakelite, was a response to the electrification of industrial and domestic life and the need for a better insulating material. A century later, one of the main challenges of modern society is no longer how to cope with increased use of energy, but how to use energy and other resources more efficiently.

Immensely versatile and intrinsically resource-efficient, plastics are proving to be the material of choice for major innovations that help improve our daily lives. They contribute to making our advanced European societies more sustainable and enhance standards of living in less developed parts of the world. Converging developments in nano and polymer technologies are a prime example of how much more can be achieved with far less.

Growth and jobs

In the past 50 years plastic materials have revolutionised the way we communicate, travel, practice sports, live in our homes, keep food fresh, practice health care and do many other things often too easily taken for granted. It's a fairly safe bet to say they will continue doing so in the next 50 years.

Innovation and dynamism in plastics are contributing to current European efforts to boost growth and employment. The past few months, for sure, have provided some striking examples of innovative use of plastics.

Lightweight jumbo

Strong and lightweight plastics made possible the launch of the world's largest commercial jetliner. Some 22% of the Airbus A380 is built with carbon-fibre reinforced plastics. The aircraft has a composite centre wing-box, a crucial structure connecting the wings to the fuselage. The increased use of plastics and assorted weight savings in aircraft allows airlines to burn less fuel, reduce emissions and cut operating costs. SpaceShipOne, the first

private spaceship to fly into terrestrial orbit, likewise made extensive use of carbon-fiber reinforced plastics to escape gravity by keeping weight low.

The year 2004 saw some more mundane breakthroughs as well. Plastic materials were everywhere to be seen in the sporting equipment used at the Athens Olympic Games, whether in athletics, ball sports, water sports or other disciplines.

Meanwhile, the millions of consumers who listen to their favorite tunes on their sleek, portable MP-3 players also have plastics to thank for strength, lightness and good looks.

Some of the most exciting developments, however, are taking place in the lab, in the nano-sphere where researchers are arranging atoms and molecules to create new materials, electronic components, medical devices and micro machines with breakthrough applications. Combining the prowess of nanotechnology and the versatility of polymers heralds a raft of affordable, high-performance, strong, tough, light and resilient materials and devices.



P l a s t i c s

Highlights of current research and development involving plastics:

Plastic electronics

Plastic electronics is the next logical step in the development of modern day electronics. It enables the design of robust, low cost and energy-efficient digital circuits that can be efficiently mass-produced by spin coating or large area printing.

These circuits are constructed using solution processing techniques and consist of transistors and other components that are made from polymers and a variety of other materials.

Such devices have scores of potential applications in environmental monitoring, logistics, portable digital devices and many others. Nanoelectronic plastic identification devices, for example, will allow the identification of individual objects in a wired environment, revolutionising retail and logistics. If plastic electronics hold up to their promises, we may one day read our newspapers and magazines from reloadable, flexible plastic sheets.

More light

Polymer light-emitting diodes (LEDs) are another field where the use of flexible plastics could enable making light-emitting devices that are more flexible, cheaper and robust. LEDs, which currently are mostly made of aluminum-gallium-arsenide, have widespread applications from lighting mobile telephones to flashlights and signal transmissions over short distances. One day, we might be able to use plastic light-emitting maps when lost on a dark road.

Better polymers

Polymer nanocomposites are one of the most significant technological breakthroughs in the plastics industry during the past few years. These are plastic resins reinforced with nanosized additives. One of the most common such nanoadditives is nanoclay, nano-sized silicate elements.

When properly dispersed, the nanoclay material swells in the polymer material and bonds strongly with the polymer chains. Nanoclay has already been introduced commercially in some plastic materials, achieving remarkable strength-to-weight, thermal, flame and barrier resistance.

Other nanoadditives currently being looked at for plastics are carbon nanotubes, calcium carbonate and titanium dioxide. Immediate potential applications for nanocomposite plastics include use in packaging and the automotive sector. However, there are many more potential applications such as longer-lasting food packaging as well as more robust and less expensive engineered plastic parts.

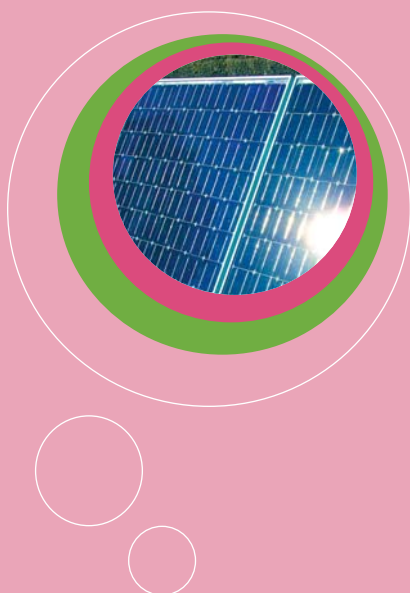


Solar power

The advent of simple, affordable and lightweight plastic solar cells would give a boost to greater use of abundant and renewable solar energy. Scientists have been struggling to substitute polymers for the expensive and fragile materials such as silicon, traditionally used in solar cells.

Researchers are seeking to develop improved polymer solar cells using nanomaterial additives, based on a thin polymer film that can be rolled out in sheets. The film contains nanoscale pieces of semiconductor material and single-walled carbon nanotubes to maximise energy conversion.

This makes it possible to cut and place large sections of solar-cell film on curved surfaces, something that is difficult with traditional cells made of brittle silicon. Such semiconductor-polymer photovoltaic devices, promise to be much cheaper to make and easier to install than current solar devices.



Biological systems

Micro-Electro-Mechanical Systems made of plastic materials for biological applications are the focus of much research. These so-called Bio-MEMS include polymeric biofluidic-transdermal microsystems, some very small devices that can, for example, give out immediate readings of a person's glucose and lactate levels by simply placing a small patch on the skin. Future applications may include the detection of cancerous cells.

Bio-MEMs hold the promise of low cost mass-production. Furthermore, they are completely biocompatible and biodegradable.

One day, such systems may also be used for transdermal drug delivery at a nanoscale, sense a diabetic patient's glucose molecules and dispense insulin as required. The result, scientists argue, would amount to recreating the biological function of the pancreas.

Smart packaging

Packaging is one field where the combining of plastics and nanotechnology will have a major impact. It makes possible the manufacturing of functional and intelligent packaging that can sense the environment – heat, moisture, etc. – and process information. Combined with radio-frequency identification (RFID) technology and peer-to-peer communication, smart packaging heralds major advances in logistics for food and other products.

Combining the plastics industry's ability to mass-produce at low cost with the functionalities previously associated with complex semiconductor devices, promises to open the door to many new markets and applications.



SpaceShipOne, twice

2004 Was a milestone in space travel. The carbon composite SpaceShipOne became the first private space craft to fly into space twice within two weeks.

The new pan-European organisation on the move

PlasticsEurope is the pan-European organisation created in May 2004 by a change in statutes of APME and of several of the national associations. The new association, representing the plastics raw material producers, has its headquarters in Brussels and Regional Centres in France, Germany, Italy, Spain and the UK. Via these Regions, PlasticsEurope works with other national plastics and related associations, with a reach extended to the EU 25 plus Norway, Switzerland and Turkey. Its vision is to make "Plastics – the material of choice for the 21st century".

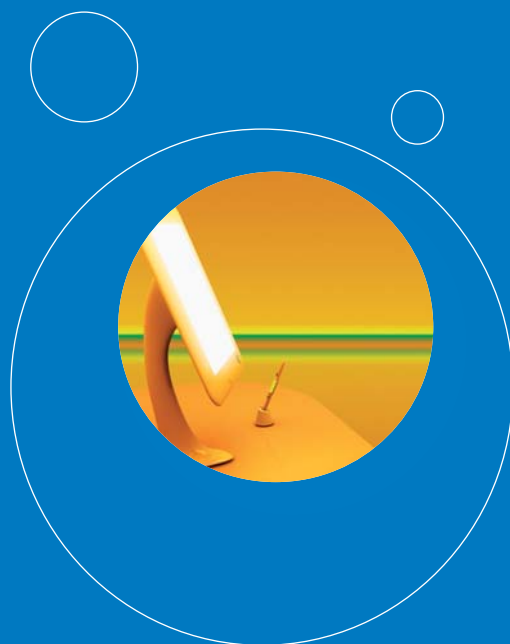
PlasticsEurope represents well over 90% of Europe's polymer production. Combined with the European polymer converting industry and machinery manufacturers, the plastics industry represents a major contributor to Europe's economic strength, employing well over 1.5 million people and generating sales in excess of €160 billion. Plastic products contribute to virtually every sector – from automotive to medical, from IT to packaging and sports. They contribute to lifestyle and human development through affordable products in mature economies and in the developing world. Plastics are key to innovation, ensuring that society's new needs continue to be met.

The Association is funded by membership subscriptions. In addition to the horizontal plastics programmes, individual Product Groups are served by the Association. Direct funding for product-specific projects is provided by the relevant members.

PlasticsEurope is responsible for the plastics products within Cefic and maintains a close relationship with our suppliers. A key objective of PlasticsEurope is to reinforce our working relationship with our customers to ensure a single voice for plastics. We seek to establish a close working relationship with the EuPC plastics converters industry.

Key objectives for PlasticsEurope – its operating plan

PlasticsEurope seeks to make a difference for the industry, in particular via enhanced and co-ordinated communications and advocacy. Its detailed work plan is articulated around four themes: Communications, Major projects, Working with the value chain and Making PlasticsEurope a reality. The major projects combine pro-active responses to external initiatives with opportunities presented by the public debate to position plastics as innovative solution providers.



Plastics and modern day challenges

An Interview with Nancy Russotto, Executive Director PlasticsEurope

Q - What are your priorities for 2005?

A – We have four principal aims for 2005: the first one is to increase our communications efforts toward all stakeholders in a coordinated way by beginning to promote the “material of choice” mindset. Secondly, we will continue work on our top projects – plastics food contact materials, waste management, energy solutions and building & construction. Thirdly, we aim to increase collaboration with our suppliers (Cefic) and, especially, our customers (EuPC), focusing on the value plastics bring throughout the chain. And, finally, making PlasticsEurope a reality and fully operational across Europe.

Q – What were the reasons for changing from APME to PlasticsEurope?

A – Actually, PlasticsEurope is an entirely different concept from APME, reflecting the industry’s desire to adapt its trade association structures to a changing world. The enlargement of the European Union refocused attention on the need to be responsive to a wider region, with increasingly complex European decision-making processes.

At the same time, industry restructuring led to rethinking the interface between the various associations and their members. While plastics producers associations across Europe worked well together in the past, PlasticsEurope institutionalises these relationships. APME and five Regions were merged into a single association to work for the polymer producers in Europe, with a single board and a single budget for Europe’s 25 plus Norway, Switzerland and Turkey.

Q – How difficult was the change?

A – Planning began in September 2002, with the formal decision for change voted in May 2004. Those eighteen months involved much hard work, led by a dedicated project leader and team.

Many difficult practical questions needed to be addressed. But we were all convinced that change was necessary. The process of change takes time, however. A real challenge is balancing the central decision-making with listening to and motivating the Regions. Local issues and local implementation are core to our work.

Q – What do you mean by “material of choice?”

A – Plastics have been around for a century. A niche product until the 1930s and 1940s, they moved into the mainstream to become a mass product material during the 1950s. Plastics today are ubiquitous, present in innumerable low-tech to high-tech applications, in daily use in rich and poor countries alike. We believe that because of their versatility and resource-efficiency, plastics will prove even more important as a material in the 21st century than they have been in the past 100 years. Plastics are the material of choice for a society that is open, mobile, global and poised for sustainable growth.

Q – Talking of sustainable growth, Europe faces some tough challenges to deliver on the Lisbon agenda ...

A – Indeed. We wholeheartedly support the Barroso Commission’s growth and jobs initiative. A major, common effort is needed. Business, government and society at large must pull in the same direction. The plastics industry can – and will – contribute through its resourcefulness. But we need to continue our focus as well on the environmental benefits plastics bring.

The unmatched versatility of the material allows new applications and products that meet the sustainability requirements of today's society. Our industry was founded on scientific and product development innovation. Innovation is a part of our roots. We will be an essential part of innovative solutions to the challenges of today and tomorrow. I often say: If plastics did not exist, they would have to be invented!

Q – What do you expect from other stakeholders?

There are, as always, a number of conditions for the plastics industry to deliver its entire potential. We will need to work within our own industry and its customers, with politicians and policymakers – and with our other partners in civil society – to ensure:

- *A more coherent approach to European energy and environmental legislation, making it possible for plastics to contribute to the full extent of their possibilities in meeting the Kyoto targets on climate change;*
- *The emergence of better regulation. Europe is in dire need of a more coherent and simplified regulatory framework. This will allow innovative technological solutions to flourish, helping us meet the environmental and economic challenges we face;*
- *The encouragement of non-regulatory contributions to the achievement of the Lisbon goals, through voluntary industry initiatives and collaborative action by business. The plastics industry needs to enlist its customer chains in the many different sectors where plastics are essential to end products: from packaging to automotive and electronics, building, healthcare and sports. We have a key role to play in calling attention to the very many benefits plastics bring to modern life – they are the “material of choice” but this is not yet as widely appreciated as we would like to see.*



Professionals with a mission

1. MISSION:

PlasticsEurope's mission is to ensure a broad recognition that plastics are a responsible material choice. Key stakeholders are: government, regulators, user industries, suppliers, non-governmental organisations, consumers and many others.

Plastics contribute significantly to sustainable development and quality of life and represent an attractive business for investors. European leaders have put the quest for growth and employment at the top of the political agenda. The plastics industry has a role to play in ensuring the sustained prosperity of European society.

Plastic materials are providing many of the technical solutions to today's environmental and sustainability challenges. This is supported by a number of important facts:

- Plastics outperform many other materials in economical and ecological terms in many applications. Plastics are versatile, easily and efficiently converted and safe in use;
- Plastics help save energy;
- Use of plastics reduces emissions and environmental impact;
- Plastics improve the quality of human life;
- Plastics' intrinsic value can be recovered as recycled material or as a source of energy.

PlasticsEurope will integrate the industry's national and European efforts to advocate the benefits, safety and sustainability of the use of plastics materials.

2. EXCELLENCE

PlasticsEurope will ensure that the European plastics manufacturers are represented by an association which:

- Will always act in accordance with the highest ethical and legal standards;
- Is committed to sustainable development and Responsible Care®;
- Strives for openness and transparency;
- Develops and supports knowledge about all plastics and the entire plastics manufacturing industry in an efficient and effective way;
- Will drive the vision that plastics are the "Material of choice for the 21st century."

PlasticsEurope's pan-European team is a highly professional group aiming for excellence and committed to provide efficient and effective services to its member companies.



3. STRATEGY:

On benefits, *PlasticsEurope* will seek to increase knowledge about plastics, the level of trust and confidence in the industry and its materials through quality information. We will demonstrate the efficiency of plastics in existing applications and highlight their role in innovation.

We will evaluate and communicate the role plastics play in everyday life. Based on the principles of sustainable development, we will show how plastics reduce environmental impact, provide for an efficient use of resources and contribute to human development at an affordable price.

On industry, *PlasticsEurope* will gather the facts concerning the competitiveness of our industry in order to support our advocacy and communications programme. We will be ambassadors for the plastics industry.

We will be the reliable source of industry information and perspectives, providing accurate facts and figures at European and national level. We will facilitate benchmarking work and highlight the effects of economic conditions, tax and regulation to ensure innovation and growth.

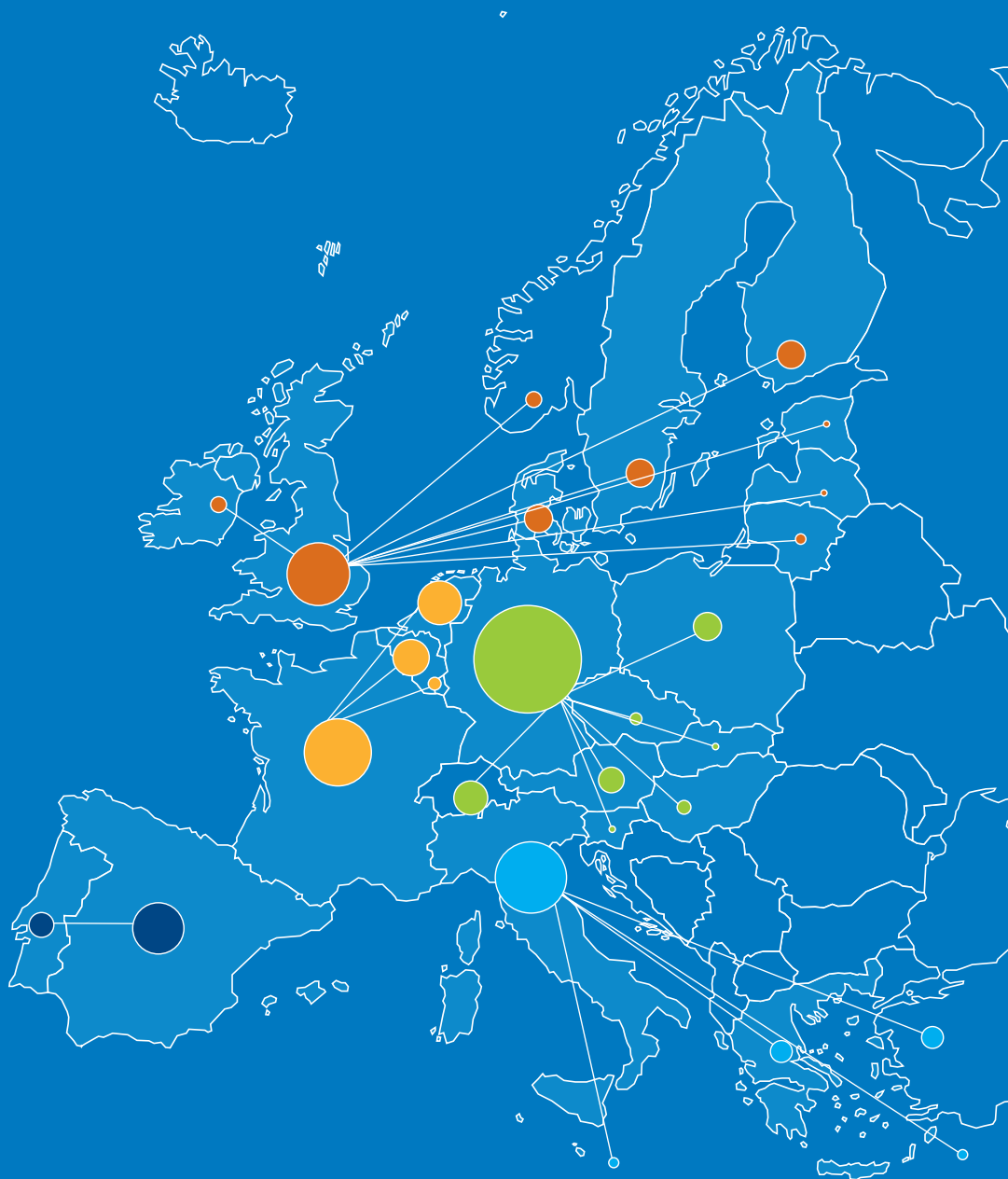
By improving knowledge about the attractive future of plastics, *PlasticsEurope* will help draw bright, young talent to the industry.

On public issues, *PlasticsEurope* will be proactive in its advocacy efforts with decision-makers, shaping the agenda, lining up resources and acting early.

We will pursue a continuous dialogue with politicians, legislators and regulators as well as opinion leaders at European and national level, to ensure they understand the benefits and potential of plastics. We will position our association as a credible source of information and advice.

PlasticsEurope will involve the entire supply chain of plastics products as well as end users in dialogue wherever appropriate.

***PlasticsEurope* will develop a single, overarching strategy driving a fully coordinated work programme with leadership and action at the right levels. *PlasticsEurope* is committed to provide efficient and effective service to meet the objectives of Europe's plastics manufacturers and work with our customers towards our vision of "Material of choice".**



Central

Germany with

- Austria
- Czech Republic
- Hungary
- Poland
- Slovakia
- Slovenia
- Switzerland

North

UK with

- Denmark
- Estonia
- Finland
- Ireland
- Latvia
- Lithuania
- Norway
- Sweden

Mediterranean

Italy with

- Cyprus
- Greece
- Malta
- Turkey

West

France with

- Belgium
- Luxembourg
- Netherlands

Iberia

Spain with

- Portugal

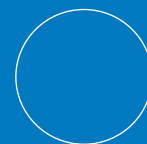
New Regional Organisation

As a pan-European non-profit organisation, *PlasticsEurope* is made up of separate legal entities with headquarters in Brussels and Regional Centres in France, Germany, Italy, Spain and the UK. Additional Regional Centres may also be established.

With a single Steering Board and one budget for Europe, the association seeks to provide the industry with a strong voice and transparent decision-making processes. Each Region maintains a Regional Advisory Board to ensure that policy setting and resourcing take adequate account of regional issues and needs and that industry on the local level remains fully engaged with the local environment including its decision-makers.

PlasticsEurope's Leadership Team brings together, under the authority of the Executive Director, the five Regional Directors and three functional directors – for Advocacy, Communications and Consumer and Environmental Affairs –. In addition, the Integration Director covers Plastics and the Economy, ensuring that a system is in place to generate and interpret for the industry's needs all required information.

Specific Working Groups and Task Forces are created with the approval of the Steering Board. They bring together member company representatives to assist *PlasticsEurope* on the basis of their individual expertise. Regional staff are sometimes included in such groups.



The six principal bodies in the *PlasticsEurope* organisation:

1. The General Assembly

- The General Assembly is the highest-ranked decision-making body in the organisation.



2. The Steering Board

- This body represents the General Assembly and is instrumental in shaping the operations of the Association in line with its vision and strategy and within policy and budget.



3. The Executive Director supported by the Leadership Team

- The Executive Director is the operational leader of the Association, leading strategy development and delivery, establishing a credible voice in the external world and ensuring a value-added, business-like service to members;
- The Leadership Team's role is to support the Executive Director to deliver the Association's strategy from an operational perspective.



4. The Product Groups

- Dealing with polymer-specific subjects, these groups are organised at European level and are supported by staff located in the Brussels Centre.



5. The Regional Directors supported by their Regional Teams

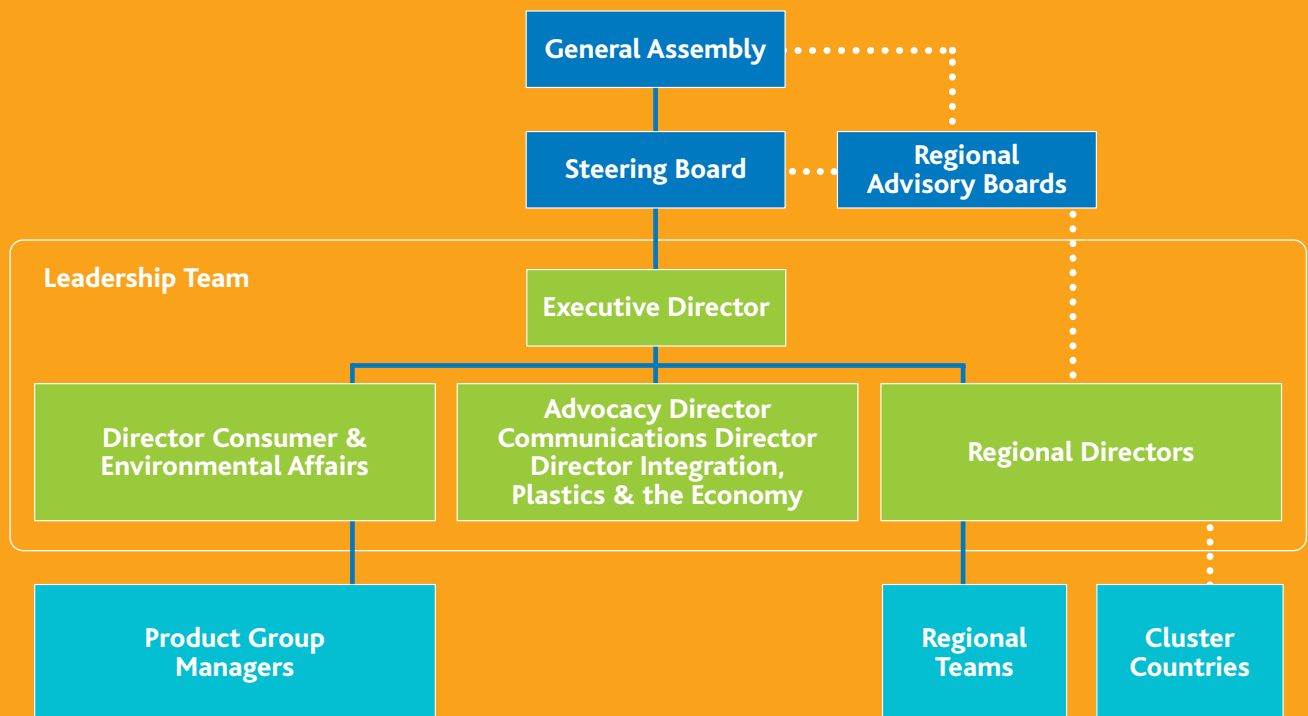
- Regional Teams manage the implementation of Europe-wide initiatives within their geographic regions and deal with regional issues. Regional Directors also act as country managers for the country where their Regional Centre is located.



6. The Regional Advisory Boards

- These Boards represent the membership of the Association with a regional and national focus.

Organisation structure





Plastics score at Euro 2004

The innovative roofs of stadiums in Portugal offered a high infrared sun ray absorption whilst maintaining light transmission.

Activities 2004

The year 2004 was a transition year for our organisation. *PlasticsEurope* was created in May by a change in the statutes of APME and of several national associations. Activities in 2004 were led by our Brussels headquarters and the *PlasticsEurope* Regional Centres (Central Region-Frankfurt; Iberian Region-Madrid; Mediterranean Region-Milan; North Region-London; West Region-Paris).

Together, these Regional Centres cover the EU 25 plus Norway, Switzerland and Turkey.

Two of these Regional Centres started their activities in 2004: the Iberian Region and the North Region. Work was largely centered around practicalities to get the new entity up and running. Contacts with national ministries started in order to address local and European issues.



A Face for Europe

To introduce *PlasticsEurope* to the newly elected European Parliament and newly appointed European Commission, *PlasticsEurope* held a charitable event on November 23rd at the Bibliothèque Solvay in Brussels. Two €10,000 donations were made to the United Fund for Belgium and Europe's Children - our Concern.

The event, "A Face for Europe," was designed to mark the many changes in Europe in 2004 in an innovative way. On exhibit were the portraits of the entire new Commission and busts of European Commission President José Barroso and European Parliament President Josep Borrell – all made from the well-known plastic LEGO® bricks.

The event was particularly well attended with the participation of Mr. Borrell, no less than four European Commissioners and many Members of the European Parliament and European Commission staff, in addition to more than 50 senior industry representatives. *PlasticsEurope* will present the LEGO® portraits to the commissioners in a follow-up to the event.

EU Policy and practice

PlasticsEurope is a privileged, reliable and proactive partner of the European institutions, politicians, NGO's and other interested stakeholders in the policy-making process. From this perspective, we maintain an active dialogue and exchange of information with many decision-makers.

Our objective is to safeguard the long term contribution of plastics to society at large by highlighting the unique properties of plastics at every stage of the overall life cycle of products.

PlasticsEurope is actively involved in promoting plastics as solution providers while addressing issues of concern. Specific activities include input in the Thematic Strategies on Prevention and Recycling and the Sustainable Use of Resources. In this framework, we support the integrated "holistic" approach for resource management by providing sound science arguments underlining the advantages of plastics in the use-phase while offering a full range of solutions in waste management. *PlasticsEurope* fully supports the Lisbon agenda particularly in its focus on innovation, one of the strengths of plastics.

At the same time we participate in the political debate on specific regulatory initiatives such as:

- The upcoming revision of the Waste Framework Directive;
- The proposal on the so called "Super Regulation" on plastics in contact with food;
- The development and revision of the Eco-label criteria for product groups and services which involve plastics, e.g. furniture;
- The finalisation and implementation of different end-of-life directives: the Packaging and Packaging Waste Directive, Electric and Electronic Equipment and End-of-life Vehicles.

Resource-efficiency

PlasticsEurope continued to generate and publicise information regarding the use of plastics. A study, "The Contribution of Plastic Products to Resource Efficiency" was commissioned from Gesellschaft für umfassende Analysen GmbH (GUA) in Vienna to investigate savings achieved in terms of energy consumption and greenhouse gas emissions thanks to the use of plastic products in Western Europe. Some of the key findings were:

- 19% of the total plastics applications cannot realistically be substituted by other materials;
- The substitution of plastics where possible would require additional energy needs of 1.02 billion GJ per year, the equivalent of 10 nuclear power plants of 1,000 MW each;
- Such substitution would result in additional CO₂ emissions of 97 million tonnes per year, equivalent to 30% of the EU's annual Kyoto target for the period 2000-2012.



Water for Africa

PlasticsEurope's "click to give" Internet campaign, set up jointly with the charity WaterAid, hit its target 1.5 million clicks in just six weeks, compared with three months in the launch year 2003. As a result, €150,000 was donated to WaterAid-funded projects in Malawi and Madagascar. Clicking to give requires a visit to a dedicated website (www.aquaplastics.org) providing information about plastics' contribution to sustainable development and, in particular, to the delivery of safe water and sanitation. This initiative shows that PlasticsEurope shares the UN millennium goal of halving, by 2015, the number of people (1 billion) without access to clean water.

Communications Activities

PlasticsEurope communications programme during the year featured:

PLASTICSEUROPE CENTRAL REGION:

K Fair:

"Plastics, first choice for winners," a show backed by PlasticsEurope and Messe Düsseldorf, was one of the highlights of K 2004, the world's largest plastics fair. The event was aimed specifically at the non-specialist public, spreading the industry's message way beyond the Düsseldorf trade fair hall.

The setting for the show was a sports stadium with plastic seats, just like a real sports arena, with large-scale monitors and various original floor coverings as used all over the world in sports halls and stadiums. The five topical "islands" of Winter Sports, Water Sports, Road Sports, Ball Sports and Track & Field displayed a range of top-class exhibits, from golf balls to rally cars. The exhibit sought to cast a light on the important, yet hidden services provided by plastic materials. People were able to see for themselves how plastics are used in the construction of sports surfaces, how a rowing boat is made and what the inside of a modern alpine ski looks like.

There were spectacular presentations and top-rank guests throughout. The divers from the German Olympic Team demonstrated training dives twice a day in a large pool – filled with plastic cushions but with no water. The European Space Agency displayed high-tech materials which are used in space and are now helping to take disabled sportspersons to a new level of performance.

Athens Olympic Games

With five gold medals, six silver medals and a bronze medal, TEAM KUNSTSTOFF was the most successful team within the German Olympic team at the 28th Olympic Games. Of the 38 sportspersons competing, 21 brought back an Olympic medal and victor's laurels.

P l a s t i c s E u r o p e

The performance was matched by the response in the media before, during and after the Games, particularly on television. No other topic in the plastics industry enjoyed such an extensive and thoroughly positive coverage during the Games .

This shows how sponsoring activities by plastics manufacturers can help boost the product's reputation. The Athens Games demonstrated that plastics contribute to today's sporting performances.

PLASTICSEUROPE MEDITERRANEAN REGION:

Communications activities in this region were aimed at schools, women and thought leaders.

Exhibitions

Together with the University of Mantua, *PlasticsEurope* Mediterranean Region organised and promoted the exhibition "Plastica, soggetto del desiderio" (Plastics, subject of desire) previously presented in Venice in 2003. It was hosted in Mantua's ancient Palazzo Ducale in September-October and displayed plastic objects grouped in four categories: aesthetics, design, innovation and jewellery.

Another exhibition on plastics and fashion, "La plastica diventa moda" (Plastics become fashion), was targeted at women audiences and the media.



P l a s t i c s E u r o p e

Competition and sponsorships

Together with the consortium for plastics recycling COREPLA, *PlasticsEurope* in Milan organised:

- A design competition on virgin and recycled plastics for design students, promoted by the magazine *Casa Vogue*. The winning prototypes were displayed at the 2005 edition of "Salone del Mobile," a major annual furniture fair in Milan;
- Sponsorship of "K2 2004 - 50 years later, project of eco-compatibility" to highlight the contribution of plastics in mountaineering equipment. An article on the topic was published on the website www.montagna.org;
- Sponsorship of "Telefono Azzurro", a non-profit association for children in need.

PLASTICSEUROPE WEST REGION:

PlasticsEurope in Paris initiated various communications projects during 2004:

- The "Top Plastique" exhibition on June 8th showed the "Vagance" bench developed by Gaelle Ligot, the winning project displayed at the "Maisons et Objets" fair;
- Publication of *Plastic no Plastic*, a book by Liliane Messika and Philippe Couette celebrating plastics and "debunking" a number of myths about the material. The book was featured on French television;
- Publication of six issues of the magazine *Entrée en Matière*, the September issue of which featured the well-known French journalist Jerome Bonaldi;
- Publication of 10 issues of the redesigned newsletter "Perspectives Plastiques";
- A press conference on March 10th on the economic performance of the plastics sector.



The Iberian and North Regional Centres were still in formation in 2004.



Unbreakable

InBev, the world's largest brewer, launched its first plastic beer bottle in 2004 offering consumers a lighter and safer packaging

Key figures

The European Statistics working group in *PlasticsEurope* collates European manufacturers' production and sales data for low density polyethylene (LDPE), linear low density polyethylene (LLDPE), high density polyethylene (HDPE), polypropylene (PP), polystyrene (PS), polyvinyl chloride (PVC) and polyethylene terephthalate (PET).

Figures quoted represent well over 95% of the total production capacity in Europe for these plastics. The figures cover EU15+Norway+Switzerland unless indicated differently. The graphs show the consolidated results for 2002, 2003 and the best industry estimates for 2004. The terms used are defined as follows:



LLDPE

covers co-polymer grades marketed as linear low density.

LDPE

covers grades of polyethylene having a density of 0.940 or less, excluding linear low density polyethylene.



HDPE

covers grades of polyethylene having densities in excess of 0.940.

PS

does not include expandable or modified grades. Production and sales figures do not include the operations of non-participating companies which represent about 150 KT in Europe in 2004.



PVC

figures are relevant for the PVC producing companies established in the 25 countries of the enlarged EU except for Greece and Slovakia. These figures also include Norway, Switzerland and Romania. The production and sales figures do not include the operations of non-participating companies, which represented about 180 KT in EU 25 in 2004.



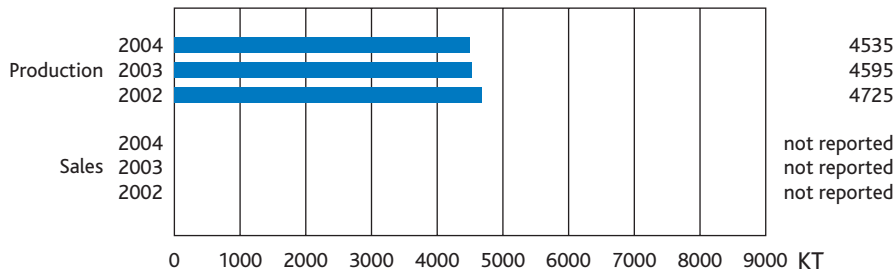
PRODUCTION

means resins produced in Europe in thousand tonnes (KT).

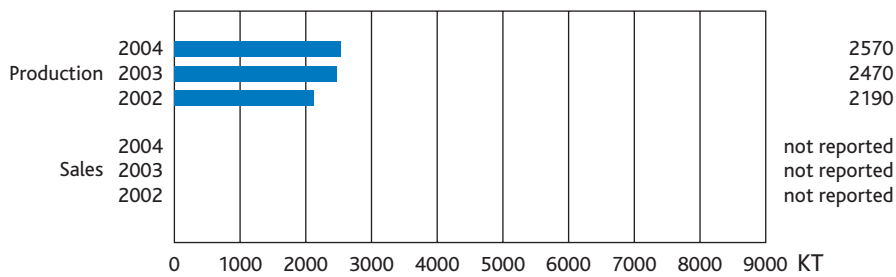
SALES

means all 'virgin' resin sold in Europe including imports in thousand tonnes (KT) (previously reported as 'Market' in 2003).

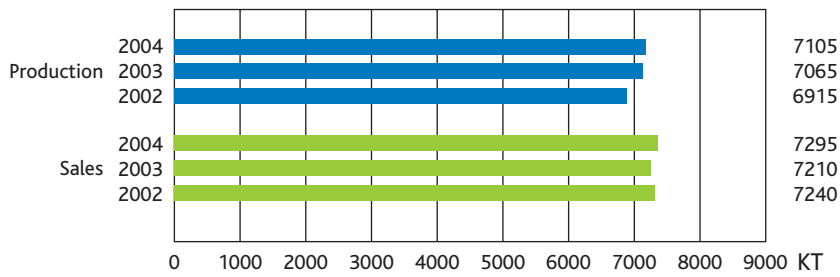
LDPE



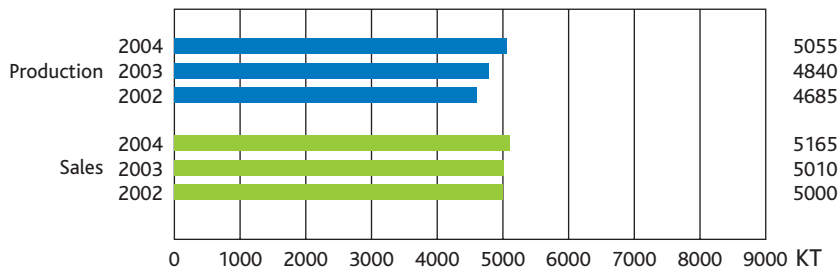
LLDPE



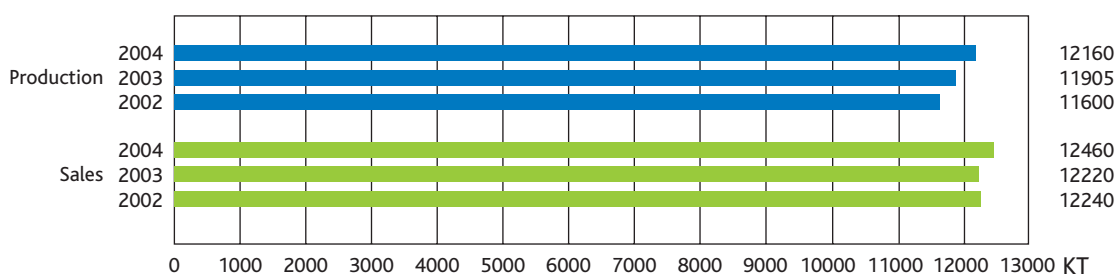
LDPE+LLDPE



HDPE

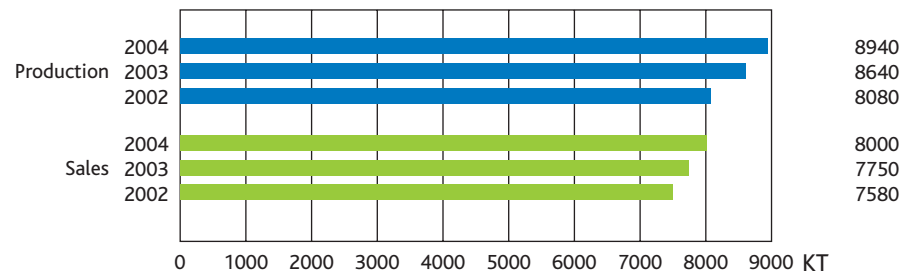


PE-Total

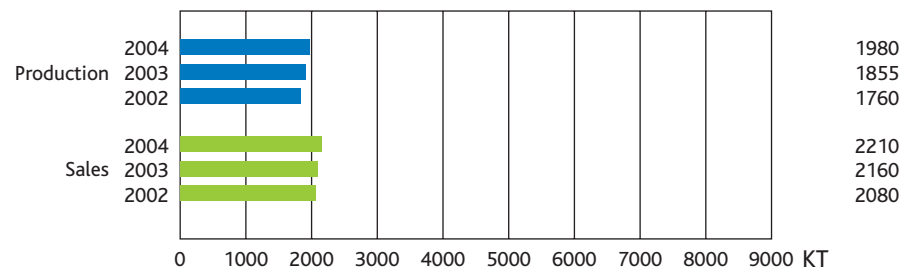




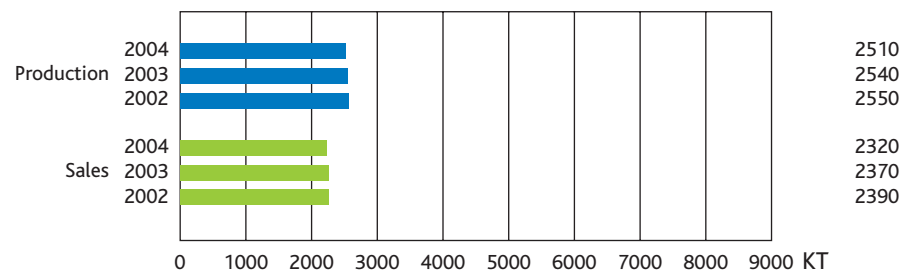
PP



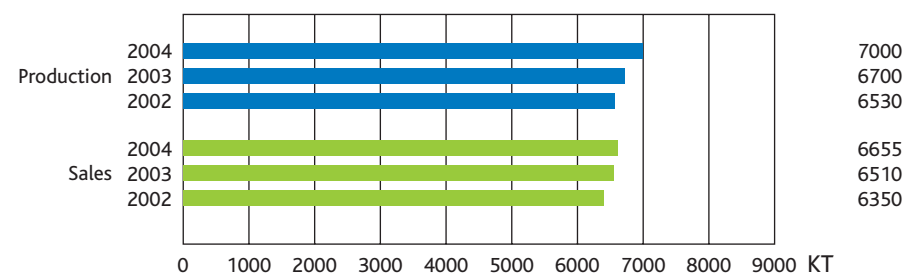
PET (bulk)



PS(1)



PVC(1)



(1) EU-25

Our members

AUSTRIA	Sunpor Kunststoff	FRANCE	TOTAL Petrochemicals (5)
BELGIUM	Basell Polyolefins ExxonMobil Chemical Europe Gabriel Technologie (1) LVM PolyOne Solvay Surface Specialties UCB	FINLAND	Styrochem Finland
		GREECE	Monotez V.P.I.
		ITALY	Lonza Italpet Preforme (6) Polimeri Europa SIR Industriale
SWITZERLAND	DOW Europe DuPont de Nemours International EMS-PRIMID Huntsman Advanced Materials NOVA Chemicals	NORWAY	Norsk Hydro Reichhold
		THE NETHERLANDS	DSM Engineering Plastics Eastman Chemical (Vordian) EVC International General Electric Plastics Resolution Performance Products SABIC EuroPetrochemicals Shell Chemicals Europe Shin-Etsu PVC Wellman
CZECH REPUBLIC	Chemopetrol Kaucuk Spolana *		
GERMANY	Bakelite BASF Bayer MaterialScience Dyneon INVISTA (2) Jackson (3) Vestolit Vinnolit	PORTUGAL	Cires Selenis
		POLAND	Elana (7)
DENMARK	Borealis	SLOVAKIA	Novacke (8)
SPAIN	Ashland Chemical Company Aiscondel Brilén (4) REPSOL YPF	UNITED KINGDOM	Asahi Glass Fluoropolymers UK BP (9) DuPontSA (10) Scott Bader

(1) Member until end 2004 – (2) KoSa until April 2004 – (3) New member as from end 2004 – (4) NOVAPET as from January 2005 – (5) ATOFINA until September 2004 – (6) M & G Polymers as from 2005 – (7) Subsidiary of Boryszew as from January 2005 – (8) Member until end 2004 – (9) Innovene as from April 2005 – (10) Advansa as from March 2005

* Associate member

New members as from 2005: Arkema (F), Equipolymers (CH), Lanxess (D), Leuna-Harze (D), Spolchemie (CZ), Ticona (D), Unipol (NL), Wacker-Chemie (D), Wolff Cellulosics (D)

Standing Committees

The Standing Committees focus on generic plastics issues such as fire safety and food contact as well as providing guidance to the Product Groups. All member companies are welcome to participate in Standing Committees.

FIRE SAFETY COMMITTEE

Chair: R. Dewitt, Solvay

Deputy Chair: C. Lukas, DOW Europe

FOOD CONTACT COMMITTEE

Chair: C. Guéris, DuPont de Nemours International

Deputy Chair: B. Brands, DOW Europe

Product Groups

Product Groups dedicate their efforts to product-related topics, including trade issues. These committees aid and inform the Association but also actively liaise with international associations such as the European Chemicals Industry Council (CEFIC), the European Plastics Converters (EuPC), representative organisations of supplier and custom industries, interest groups, and the wider international plastics community.

PET COMMITTEE

Chair: A. Ciotti, DOW Europe (1)

Member companies: Brilén (2), DOW Europe (1), DuPontSA (3), Elana (4), Invista (5), Italpet Preforme (6), Vordian, V.P.I., Wellman

- (1) Equipolymers as from January 2005
- (2) NOVAPET as from January 2005
- (3) Advansa as from March 2005
- (4) Subsidiary of Boryszew as from January 2005
- (5) KoSa until April 2004
- (6) M & G Polymers as from 2005

POLYSTYRENE COMMITTEE

Chair: B. Nusbaumer, TOTAL Petrochemicals (1)

Member companies: TOTAL Petrochemicals (1), BASF, BP (2), DOW Benelux, DOW Europe, Kaucuk, Nova Chemicals, Polimeri Europa

- (1) ATOFINA until September 2004
- (2) Innovene as from April 2005

EPOXY RESINS COMMITTEE

Chair: P. Yianni, Resolution Europe

Member companies: Bakelite, DOW Europe, EMS-PRIMID, Huntsman Advanced Materials, Resolution Performance Products, SIR Industriale, Surface Specialities UCB

POLYCARBONATE / BPA COMMITTEE

Chair: B. Richter, Bayer MaterialScience

Member companies: Bayer MaterialScience, DOW Europe, General Electric Plastics

POLYOLEFINS COMMITTEE

Chair: K. Abbås, Borealis

Member Companies: Basell Polyolefins, Borealis, BP (1), Chemopetrol, DOW Europe, ExxonMobil Chemical Europe, Polimeri Europa, REPSOL YPF, SABIC EuroPetrochemicals, TOTAL Petrochemicals (2)

- (1) Innovene as from April 2005
- (2) ATOFINA until September 2004

EXPANDABLE POLYSTYRENE COMMITTEE

Chair: P. Ayrey, NOVA Chemicals

Deputy Chair: J. Fischer, BASF

Member Companies: BASF, BP (1), DOW Deutschland, Gabriel Technologie, Jackson, Kaucuk, Monotez, NOVA Chemicals, Polimeri Europa, REPSOL YPF (Polidux), Styrochem Finland, Sunpor Kunststoff, Unidek Group, Unipol

- (1) Innovene as from April 2005

FLUOROPOLYMERS COMMITTEE

Chair: L.Hoy, Asahi Glass Fluoropolymers UK

Member companies: Arkema (1), Asahi Glass Fluoropolymers, DuPont de Nemours International, Dyneon, Solvay Solexis

(1) ATOFINA until September 2004

ABS / SAN COMMITTEE

Chair: A. Glück, BASF

Member Companies: BASF, DOW Europe, General Electric Plastics, Lanxess Deutschland, Polimeri Europa, REPSOL YPF (Polidux)

UP RESINS

Chair: D.Vincent, Cray Valley

Deputy Chair: S. Osterwind, Ashland Composites Polymers

Member companies: Ashland Composites Polymers, Cray Valley, DSM Composite Resins, Lonza, Reichhold, Scott Bader Company, SIR Industriale

Vinyls Committee / ECVM

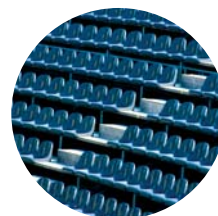
Chair: David Thompson, EVC International (He was succeeded at the end of 2004 by N.Paul Neu, Solvin)

Member Companies: Aragonesas (Aiscondel), Arkema (1), Cires, EVC International, Hydro polymers, LVM, Shin-Etsu PVC, Solvin, Spolana, Vestolit, Vinnolit

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.

(1) ATOFINA until September 2004



Who's who

APME Steering Committee (until May 2004)



Dr. Werner Prätorius

President

W. PrätoriusBASFPresident Petrochemicals Division

Vice-President

R. GeninBasell PolyolefinsPresident Polyolefins Europe

Members

D. BaudrandBPChief Executive Officer BP Solvay Polyethylene

Ch. ChuretDOW EuropeVice President Sales

P.J.F. MillerBakeliteChief Executive Officer, Bakelite

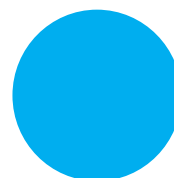
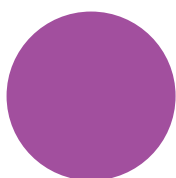
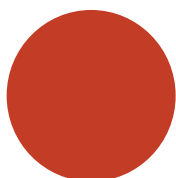
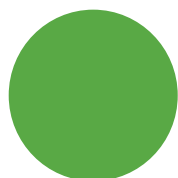
F.H.M.A. NotebornSABIC EuroPetrochemicalsChairman & Chief Executive Officer of the Managing Board

Ph. PôletLVMGeneral Manager

D. C. RolphBorealisExecutive Vice-President Polyolefins

Treasurer

J.P. PleskaSolvayManaging Director - SBU Vinyls



Who's who

PlasticsEurope Steering Board (elected May 2004)

President

J. Taylor Borealis Chief Executive Officer

Vice-Presidents

D. Baudrand BP (1) Chief Executive Officer BP
Solvay Polyethylene (1)
J. Feldmann BASF Member of the Board of Executive Directors

Members

R. Bornhofen Vestolit Chief Executive Officer
G. Ghisolfi (2) M & G Polymers (Italpet Preforme) Vice President Corporate Operation
and Development
JB. Lartigue TOTAL Petrochemicals (3) President (3)
I. Marco Arboli REPSOL YPF Polyethylene Director Repsol Quimica
(Repsol YPF group)
P.J.F. Miller Bakelite Chief Executive Officer, Member of the Board
H. Noerenberg Bayer MaterialScience Chairman of the Board of Management
Ph. Pôlet LVM General Manager
M. Pugh NOVA Chemicals International Vice President, Managing Director for Europe
J. San Pedro Vordian Managing Director EMEA
(Europe, Middle East and Africa)
D. Thompson EVC International Chief Executive Officer EVC Films (4)
V. Trautz Basell Polyolefins President and Chief Executive Officer
K. van Haasteren SABIC EuroPetrochemicals Managing Director Polymers,
Member of the Managing Board
J. van Rijckevorsel Solvay Member of the Executive Committee
- General Manager Plastics Sector
M. Wildi DOW Europe Commercial Vice President Europe and
MEA (Middle East Africa) Plastics

Treasurer

M. Paravidino Polimeri Europa Benelux Chief Executive Officer

(1) As from April 2005, Innovene: Senior Vice President European Operations

(2) Resigned for 2005

(3) Until September 2004, ATOFINA: Executive Vice-President, Petrochemicals

(4) Until September 2004: Commercial Director

PlasticsEurope

Leadership Team May 2005



Nancy Russotto
Executive Director



Giuseppe Riva
Regional Director (LT)
Mediterranean Region



Peter Orth
Regional Director (LT)
Central Region



Klaus Vorspohl
Director
Consumer and
Environmental Affairs



Alain Chapelle
Regional Director
(until April 2005)



Michel Loubry
Regional Director (LT)
West Region (May 2005)



Jan te Bos
Director
Advocacy



Jan-Erik Johansson
Regional Director (LT)
North Region



Moniek Delvou
Director
Communications



Antonio Limones
Regional Director (LT)
Iberian Region



John Hamlin
Director Integration,
Plastics and the Economy

www.plasticseurope.org

To learn more about *PlasticsEurope*, please consult our web site: www.plasticseurope.org or simply give us a call.





PlasticsEurope

Avenue E. Van Nieuwenhuyse 4 - Box 3

B-1160 Brussels, BELGIUM

Tel: + 32 (0)2 675 32 97

Fax: +32 (0)2 675 39 35