



ASSOCIATION OF PLASTICS
MANUFACTURERS IN EUROPE



PLASTICS: DRIVING INNOVATION FOR FUTURE GENERATIONS

2002 ANNUAL REPORT

2 0 0 2



PLASTICS: DRIVING INNOVATION FOR FUTURE GENERATIONS

2 0 0 2

THE MATERIAL OF CHOICE FOR INNOVATION



DR. WERNER PRÄTORIUS

2002 was a year which undoubtedly presented some tough challenges for the plastics industry, with economic downturn and increasing consolidation showing little sign of slowing down. Yet in spite of these difficult times, demand for plastics remains encouragingly strong across all market sectors – testimony

to their unrivalled potential to provide innovative and cost-effective solutions to the challenges of modern life.

It is no exaggeration to state that plastics have revolutionised modern life – indeed, it is virtually impossible to think of any modern product or innovation that has not been enabled by plastics. Their unique characteristics, which provide designers with an almost infinitely versatile and affordable range of choices, have placed them firmly at the centre of technological development. Crucially, plastics' innovative potential does not come at the expense of resource efficiency. No other material can compete with plastics when it comes to combining the attributes to meet technological demands in tandem with preserving resources.

APME plays a vital role in bringing awareness of plastics' unique potential to legislative, business and consumer audiences across Europe, working to ensure recognition of the fact that if we are to use our resources wisely and effectively, plastics will be an integral part of all our solutions. In the same manner, our many product committees, supported by dedicated staff, guide work related to specific plastic types.

Nancy Russotto, APME Director General, oversees our work with legislators to ensure the plastics industry has a credible and convincing voice at European level, especially with a new policy agenda opening broader themes against which to measure the potential of plastics. Supporting this is the work of Neil Mayne's team at the Technical and Environmental Centre, ensuring the provision of informed and authoritative data to enable the industry to back up its arguments at all levels of the debate.

Our communications programme, led by Yvonne Barcelona, works to convince both opinion formers and the wider public of the unrivalled benefits of plastics as the material of choice. This year the plastics industry broke new ground with a targeted advertising campaign across Europe, timed to coincide with the Johannesburg conference and the renewed focus on sustainable development. At the end of 2002, APME formed a partnership with the international charity WaterAid and in March 2003 publicly launched the 'click to give' fundraising site www.aquaplastics.org.

All this activity would not be possible without the continuing support of members and industry associations, so vital in enabling APME to deliver an effective and co-ordinated programme of activity. I am especially pleased with the closer working relationship we now enjoy with the National Plastics Associations (NPAs) and look forward to building on this in 2003. Similarly, ties with related European industry organisations, notably The European Chemical Industry Council (CEFIC) and The European Plastics Converters (EuPC), continue to be strengthened. The presence of our Director General in the staff management team, and my participation as President in meetings of the CEFIC board represent important steps to ensure that issues relating to plastics are profiled and, where appropriate, are integrated into the chemical industry's wider agenda.

Having succeeded Arnaud d'Aramon, whose dynamic leadership and hard work brought real focus to APME, this year marks the first of my presidency. It was also the year of the World Summit in Johannesburg, which put sustainable development firmly back on the agenda for both governments and businesses. As we look ahead to 2003, I am confident that the plastics industry is in a unique position to meet the challenges outlined at Johannesburg and that it will continue to innovate – new products, technologies and systems – in order to advance its contribution to a more sustainable society.

Dr. Werner Prätorius
APME President



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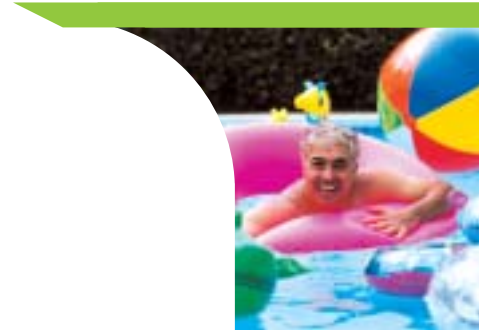
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OVERVIEW OF 2003

PLASTICS AND THE LEGISLATIVE DEBATE

During 2002, APME welcomed signs that EU environmental policy thinking was increasingly taking a more holistic approach, with the possibility to consider waste management in a broader context.

The debate surrounding end-of-life recovery targets for the packaging, automotive and electrical and electronic sectors began to draw to a close, with encouraging signs that the work of APME and its partners to promote sensible decision making with the help of concepts such as eco-efficiency, has generally been successful. This important work has led to greater recognition of the limitations to plastics recycling as seen in the review of targets in the Packaging and Packaging Waste Directive. Likewise are the signs that decision makers are increasingly looking at the broader theme of Sustainable Development, including resource use and energy policies, as evidenced by the priorities of the 6th Environmental Action Programme (6th EAP).

The evolution in the policy agenda presents us with a much more exciting context in which to position plastics and their innovative potential than allowed by the previous emphasis on waste alone. The focus on achieving maximum resource efficiency allows us to feature the major contribution made by plastics products in use. When judged against such criteria, plastics have clear advantages – as borne out by recent research commissioned by APME. The research, which examined plastics across a number of key application sectors and compared them to products made from other materials, clearly demonstrated the advantages of plastics and concluded that, in almost all cases, plastics products have an environmental and economic advantage over other materials.

The plastics industry also has an important contribution to make to the climate change debate. Plastics play an integral role in the design of renewable energy sources such as solar panels and wind turbines, while their light weight and insulating properties contribute to overall energy savings in numerous applications. In addition, plastics waste has significant potential as an energy source, offering a viable and environmentally sound alternative to fossil fuels. Looking ahead to 2003, APME will continue to drive awareness of the opportunities presented by plastics to reduce our dependence on the Earth's natural resources.

The increasingly holistic focus on environmental policy at EU level was echoed at the World Summit on Sustainable Development, which confirmed the need to concentrate on maximising our resources, with particular emphasis on water and energy. APME is looking forward in 2003 to working with European decision makers to demonstrate the very real contribution plastics can make to these objectives.



APME'S TECHNICAL PROGRAMME

Technical and scientific studies continue to form a vital component of our activities, with APME's Technical & Environmental Centre (TEC) providing the knowledge and expertise necessary to support our messages around resource efficiency and innovation.

As the European directives look set to be finalised and the industry concentrates on their implementation, APME is working with a number of partners to facilitate the identification of technological developments for recovery. Significant energy and resource savings are made during the manufacture and use phases of plastics and, increasingly, at end-of-life. However, there is still work to do at the end-of-life phase and TEC continues to explore various techniques to improve recovery technologies. The limited availability of homogeneous and clean waste streams for mechanical recycling means interest in feedstock recycling and gasification technologies is increasing, with the treatment of shredder residue and its high plastics content becoming ever more important.

Technology is only the first step, with the ultimate success of its implementation depending on numerous local factors, including economic considerations. Here, APME's work into eco-efficiency is a valuable reminder that too great an emphasis on recycling as a recovery option for plastics waste could mean increasing waste management costs with limited environmental benefit. Following similar work within the packaging sector, APME has undertaken research into both the environmental and economic impacts of a number of waste management scenarios for the automotive and electrical and electronic sectors. The eco-efficiency research, demonstrating the need to get the balance right between recycling and other recovery options, was peer-reviewed in 2002 and the results validated by independent scientists.

APME also continues to support research across the whole life cycle of plastics, from 'cradle to grave', in order to demonstrate that comprehensive product assessment has to include economic, environmental and social aspects along the whole life cycle. Studies increasingly show that plastics products in use actually provide solutions for Sustainable Development objectives through their low resource consumption, energy-saving features in use and high recovery potential at end-of-life.



Our annual survey of consumption and recovery in the European plastics industry, commissioned and compiled by TN Sofres for the year 2000, demonstrated that recycling and other recovery methods for plastics in all applications showed significant growth. Despite an increase in demand for plastics in Western Europe of 3 per cent, with consumption rising to 36.8 million tonnes, recovery outstripped this and increased by 11 per cent. From 2003 onwards, the reports will be published in the late spring to ensure data from the preceding year can be presented rather than from two years previously. The report will also be expanded to include data from the ten East European accession countries to the European Union.



APME remains committed to building links with partners and specialists to pool information and expertise. During 2002, APME has been working closely with The Association for the Sustainable Use and Recovery of Resources in Europe (ASSURRE) to develop an integrated approach to resource and waste management, with particular emphasis on promoting the use of municipal waste incineration as an energy source as well as the preparation of Solid Recovered Fuels based on combustible waste. APME is also closely involved with the Association of Cities and Regions for Recycling (ACRR) via a project aimed at assessing the potential for increasing plastics waste recycling within the building and construction sector.



Similarly, APME continues to help facilitate technical exchange through the European Thematic Network (ETN), a partnership dedicated to maximising the eco-efficient recovery of end-of-life vehicles. The partnership's website, www.plastics-in-elv.org, remains a comprehensive information source for the industry. In 2003, APME will act again as an organising force for knowledge exchange at the fourth *Identiplast* conference in April. The conference brings together an international audience to identify the opportunities of plastics recycling through the sharing of information and best practice.

2002 saw TEC prepare to say goodbye to two highly valued team members, Freddy Maréchal and Herbert Fisch, both of whom have made important contributions to APME's research programme. Freddy Maréchal, who retires from Solvay at the end of 2002 after six years with APME, was involved with numerous TEC research initiatives, including work with the packaging sector to champion the application of eco-efficiency methodologies. Herbert Fisch, who will return to BASF in April 2003, after four years' secondment, has been a key driving force behind APME's research into plastics' applications in the automotive, electrical and electronic, and building and construction sectors.



*www.plastics-in-elv.org :
Leveraging the possibilities of the
Internet for a sustainable future*

Looking ahead to the future, APME warmly welcomes Axel Kistenmacher and Jean Schoemans to the TEC team, seconded from BASF and Solvay, respectively. Axel Kistenmacher takes particular responsibility for the packaging and automotive sectors, while Jean Schoemans will drive research into life cycle analysis and plastics' applications in both the building and construction and electrical and electronics sectors.

Next year, the focus of our new team will be exploring resource strategies for the whole life cycle of plastics products and demonstrating the unique innovative potential of plastics to meet the challenges of a modern sustainable society.

COMMUNICATING THE SUSTAINABILITY OF PLASTICS

APME's communications activity continues to promote the positive benefits of plastics to audiences across Europe. Working in close co-operation with National Plastics Associations and our partners, our ongoing media relations programme aims to raise recognition of plastics' advantages through a wide range of consumer and industry media and evoke the response, "I never thought of plastics like that!"

Over the years, a number of groundbreaking communications activities have been conceived and carried out by APME. 2002 was no different and saw APME unveil its first-ever generic advertising campaign. The advertising, part of a wider drive to convince opinion formers of plastics' vital contribution to sustainable development, was timed to coincide with the World Summit in Johannesburg in August, and the increased interest in sustainable development. The campaign ran in five countries – France, Italy, the Netherlands, Sweden and Spain, as well as in the pan-European titles *The Financial Times*, *European Voice* and *The Economist*. The advertising set out to reach over 70 per cent of opinion formers an average of four times during the campaign with positive messages about the way plastics help society, specifically through improving healthcare.

The advertisements also invited readers to visit www.plasticsworld.com to discover more about plastics' contribution to sustainable development. Pre- and post- research found that advertising can be a successful means of generating an improvement in opinions about plastics and a positive reappraisal of the plastics industry.



A young child in a yellow swimsuit is playing in the sand at a beach. The child is leaning over, with their hands in the sand, and their face is partially visible in profile, looking down. The background is a bright, sunny beach scene with sand and a blue sky.

An audience important to the widespread acceptance of plastics as a valued material are product designers. APME continued to target the designers of tomorrow with its third European design competition: *Mind, Body, Soul*. The competition, which aims to encourage young designers to think about the potential of plastics as a design material, was launched at the end of 2001 through a series of national initiatives in Denmark, France, Germany, Italy, the Netherlands and the United Kingdom. Finalists met for the international prize ceremony in September 2002 at the prestigious *100% Design* exhibition in London. Sustainability was an important area of focus in the judging criteria, with judges keen to emphasise that in an age of depleting resources, plastics have more to offer the world of product design than almost any other material. The final prototypes were displayed in an eye-catching stand at *100% Design* to showcase the innovative potential of plastics to the European design community, with first prize going to French student Samuel Prigent and his inventive plastics playground. The competition, and the final designs, attracted widespread media interest and proved a compelling platform from which to demonstrate the potential of plastics as a design tool.

During 2002, the results of APME's regular attitudinal survey, which monitors perceptions of plastics from a number of different audiences, became available. The results of the 2002 research provided some valuable insights into how best to direct future communications, with a confirmation that opinion formers remain key to unlocking popular opinion about plastics. To this end, communications for 2003 will continue to centre on bringing alive the plastics industry's commitment to sustainable development – an area which has much resonance with opinion formers and where plastics have a strong story to tell.

Finally, the last months of 2002 saw APME form a partnership with the international charity WaterAid. This was publicly launched in March 2003 with the 'click to give' fundraising site www.aquaplastics.org. Not only will the industry contribute to one of the priorities of Europe – to work to provide clean water and sanitation to one-half of the world's population currently deprived of both- but it will also ensure both opinion formers and a wider audience are aware of the vital role plastics have to play in a sustainable future.



www.aquaplastics.org
An on line click-to-give initiative in partnership with WaterAid aimed at providing clean water and sanitation to those who need it most.



PLASTICS = INNOVATION!

Ever since their creation, plastics have had an enormous impact on modern society and life, to the extent that nearly all of today's food distribution, healthcare, transportation, communications systems and other new technologies would be unimaginable without them. The ability of plastics to provide designers and industry with an almost unlimited range of innovative and cost-effective solutions ensures they are consistently the material of choice when it comes to meeting specific performance requirements. Crucially, however, plastics' potential does not come at the expense of their overall positive contribution to sustainable development, with environmental protection and improved living standards as much a focus for innovation as economic prosperity and technical progress.

The word innovation could well have been created especially for plastics. Here we look at some of the innovations that plastics are enabling and which are making a real difference to the pursuit of a sustainable society and our quality of life.

An integral component of plastics' environmental credentials is their contribution to the design of renewable or alternative energy technologies. Photovoltaic cells, which help convert the sun's energy to usable power, rely on plastics' tough, weather resistant and light transmission properties to work effectively. Until now, cost has been a prohibitive factor in the wide-scale adoption of solar power, but recent advances mean that a low-temperature technology now has considerable potential to be produced on a mass scale. The plastics-based technology enables a reduction in the processing temperatures necessary to convert the sun's energy and will dramatically reduce the cost of electricity from solar radiation. Furthermore, it is estimated that the equivalent energy used for production of the plastics will be recovered by the active solar cell within two to three years.

Likewise, plastics are proving vital in enabling wind power to become the most efficient new renewable energy source as well as the fastest-growing, with an average growth of over 15 per cent each year. Two decades ago, wind energy cost about 40-50 cents per kilowatt hour, but now costs only 6.5-7.5 cents per kilowatt hour, and through innovation and improved efficiency through plastics, is being reduced still further. The blades of a wind turbine need to be durable, lightweight, non-corrosive, have high thermal resistance and be able to bear high force loads. The inherent properties of plastics, especially epoxy resins and polyester, make them ideally suited to meeting all these demands, and they are used widely in this rapidly growing area.

Plastics also play a key role in conservation of more "traditional" energy sources with a prime example being the ability to prevent heat loss in buildings. The industry is constantly researching ways to enable optimum thermal insulation – as part of this research, a special rigid polystyrene foam has been developed for the external insulation of buildings. Compared to traditional insulating materials, this foam is based on infrared absorbers and reflectors that lower conductive heat transfer even further than existing materials and improve thermal insulation. By using ten litres of petroleum to manufacture 2m² of this polystyrene foam (10 centimetres thick) it is estimated that 1,200 litres of heating oil can be saved over a fifty-year period.



Photovoltaic cells rely on plastics' tough, weather resistant and light transmission properties to work effectively



Plastics play a key role in the development of medical care



Plastics also play a key role in conservation of more "traditional" energy sources

Plastics are also champions of prevention, with the packaging industry leading the way when it comes to using less to do more in order to minimise impact on the environment. Technological innovation is a key feature in the continuing development of efficient and beneficial packaging, enabling the industry to improve performance and tailor plastics more closely to specific product requirements. Overall, plastics packaging has become lighter and even more efficient – in fact, over a ten-year period it is estimated that plastics packaging per unit has been reduced by around 28%. Ongoing performance innovation means that companies are able to make use of oxygen-absorbing packaging film for their products. The food is prevented from premature decay and shelf life is increased, thereby avoiding wastage.

In addition to the environmental contribution of plastics, innovation by the plastics industry also brings enormous social benefits, with plastics' vital role in modern technologies and medicine providing access to higher standards of living, healthcare and information to an ever growing proportion of the world's population. The giant leaps we have made in terms of technological advancement over the last one hundred years – from space travel to mobile phones and the Internet – would all have been impossible without the endless versatility of plastics.

Plastics play a key role in all aspects of medical care, from life-saving heart surgery to blood bags and plastics pill capsules. Constant innovation now means that once unimaginable medical breakthroughs are regarded as commonplace. For example, an artificial cornea has recently been developed from a special silica to provide eye patients with a brand new cornea. Only 0.3 to 0.5 millimetres thick, highly transparent, flexible and with bio-mechanics similar to a natural cornea, the new artificial cornea can restore clear vision. Looking to the future, tele-operations via remote control with surgical interventions accurate to sub-millimetres are becoming an increasingly likely possibility thanks to plastics.

Plastics are also integral to modern transport, with the automotive sector an exciting area in which plastics are making important contributions to innovation, both in terms of improving environmental efficiency, and in the improved design and manufacture of cars. For instance, plastics are playing a critical role in improving vehicle safety through their use in components such as windscreens, seat belts, airbags and side impact protection. The sophisticated electronic equipment which has been developed to make cars safer would be impossible to produce without plastics. A sensor which is micro-machined and packaged in a small plastics unit can now detect at an early stage when a vehicle is about to overturn and ensures safety devices are activated in good time. Engineers are also increasingly using plastics in sophisticated crash testing; a lightweight flexible sensing tape is used to generate 3-dimensional measurements in order to measure the effect of impacts on passengers. The tape contains sensors which rely on specially treated plastic optical fibres to measure movement and bending.

As these examples demonstrate, the plastics industry is committed to the ongoing development of innovative materials to meet society's ever-changing demands. Yet, as we look to the future, we are well aware of the need to avoid complacency. Instead, the industry will continue to innovate and challenge itself to ensure that plastics remain the material of choice for both technological and sustainable solutions in our future world.



Plastics are at the core of innovation in electronics and telecommunications



Plastics have greatly contributed to weight reductions in packaging



Plastics are an integral part of safety in modern transport

EUROPEAN STATISTICS

APME 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 per cent of the total production capacity in Western Europe for these plastics. The graphs show the consolidated results for 2000, 2001 and the best industry estimates for 2002. The terms used are defined as follows:

LDPE

covers all grades of polyethylene having a density of 0.940 or less, excluding co-polymer grades marketed as linear low density polyethylene.

HDPE

covers all grades of polyethylene having densities in excess of 0.940.

LLDPE

is a third PE grade for which industry statistics collection started in 1988 as part of total sales by Western European manufacturers into Western Europe.

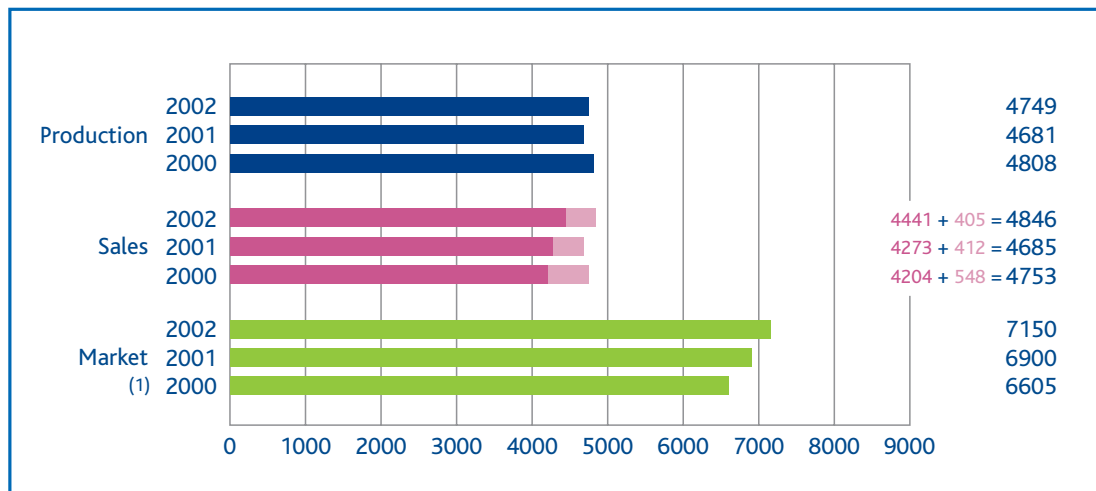
PS

does not include expandable or modified grades. Production and sales figures do not include the operations of non-participating companies, which represented about 16 KT in Western Europe in 2002.

PVC

production and sales figures do not include the operations of non-participating companies, which represented about 40 KT in Western Europe in 2002.

LDPE

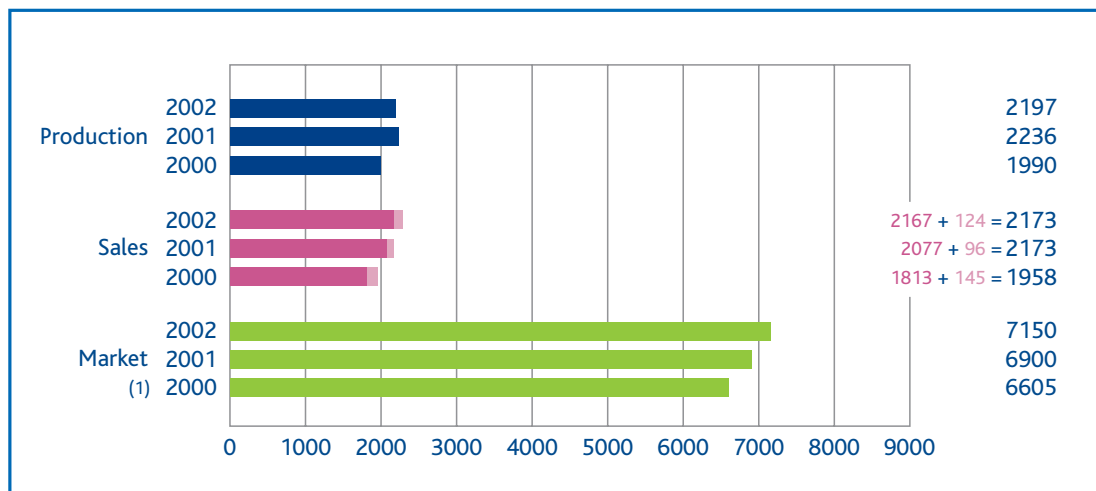


(1) Includes LLDPE

FIGURES IN 000 TONNES



LLDPE



(1) Includes LDPE

FIGURES IN 000 TONNES



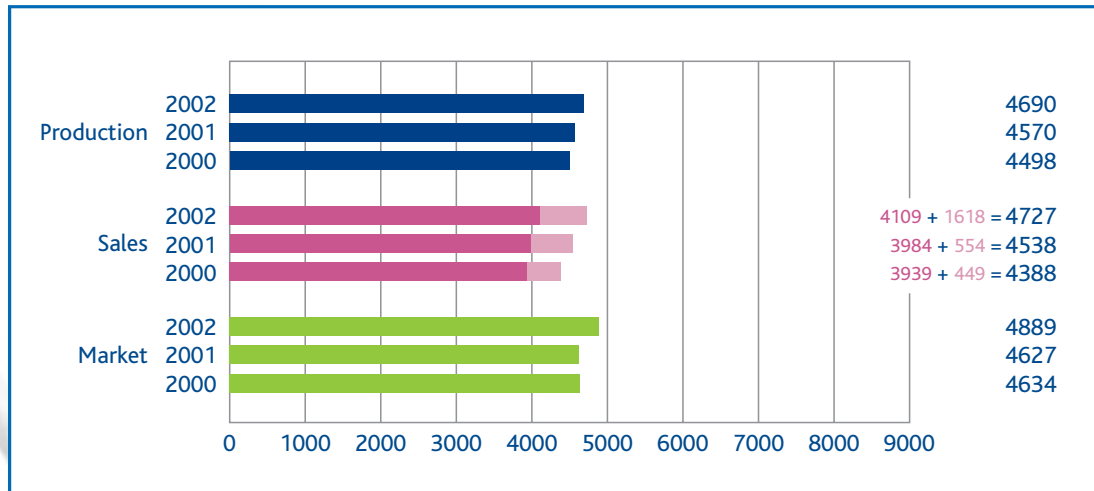
 Sales reported by Western European manufacturers in the Western European market (000 tonnes)

 Sales reported by Western European manufacturers outside the Western European market (000 tonnes)



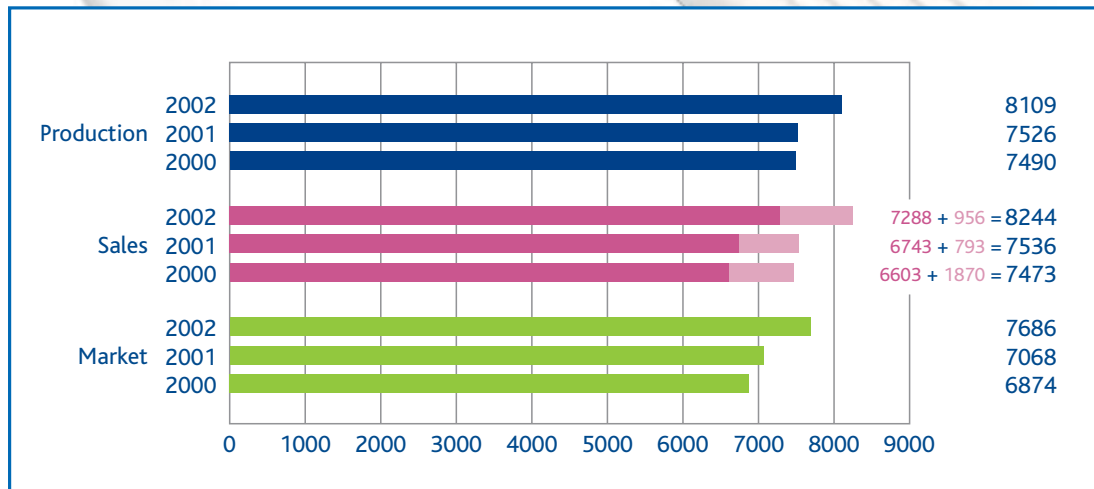
STATISTICS

HDPE



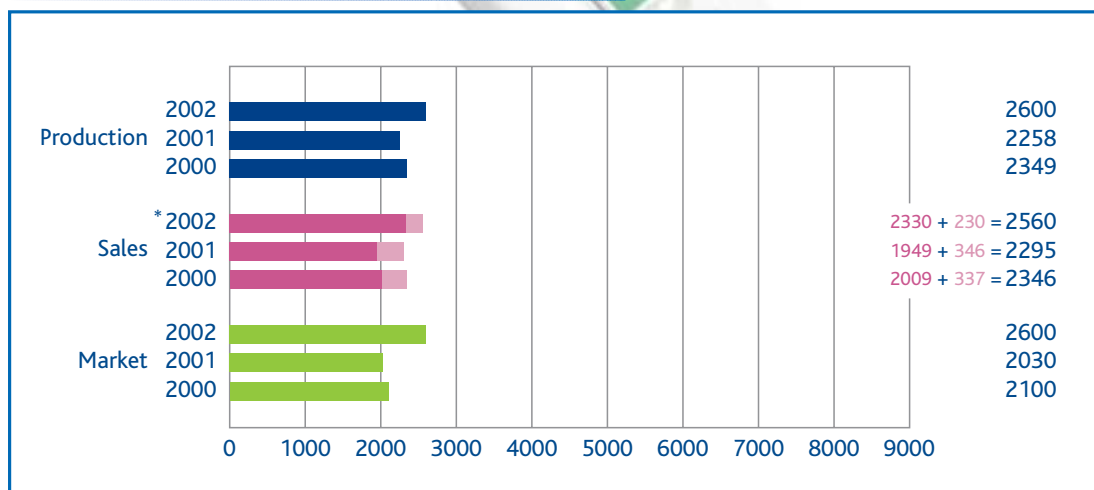
FIGURES IN 000 TONNES

PP



FIGURES IN 000 TONNES

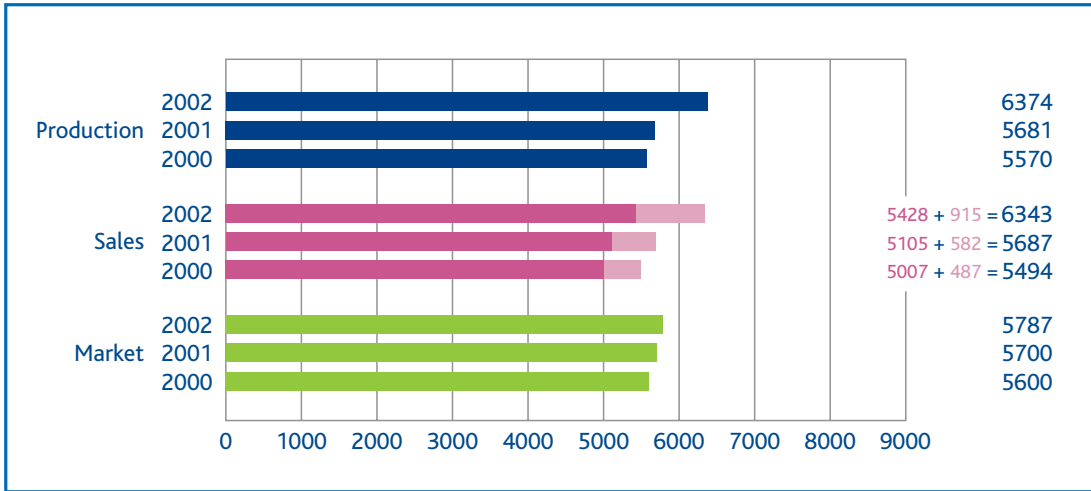
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FIGURES IN 000 TONNES

* Includes Eastern Europe

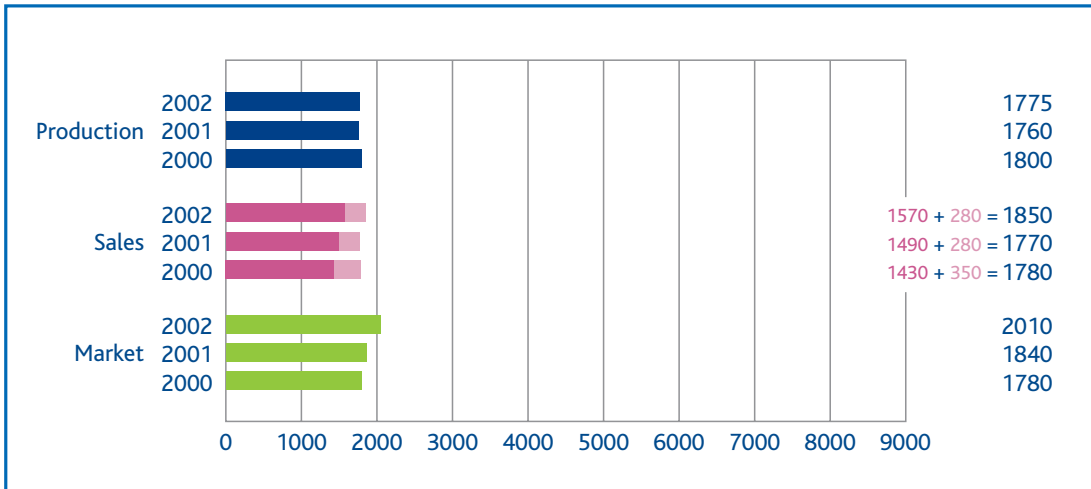
PVC



FIGURES IN 000 TONNES



PET



FIGURES IN 000 TONNES

- Sales reported by Western European manufacturers in the Western European market (000 tonnes)
- Sales reported by Western European manufacturers outside the Western European market (000 tonnes)





STEERING COMMITTEE

PRESIDENT

- W. Prätorius (1) *President Petrochemicals Division, BASF*
 A. d'Aramon (2) *Group Vice President, Styrenics, ATOFINA*

VICE PRESIDENT

- R. Genin (3) *President Polyolefins Europe, Basell Polyolefins*
 W. Prätorius (4) *President Petrochemicals Division, BASF*

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 Ch. Churet *Commercial Director, DOW Europe*
 P.J.F. Miller (5) *Chief Executive Officer, Bakelite*
 H. Noerenberg (6) *Managing Director, Business Group Polyurethanes, Bayer*
 F.H.M.A. Noteborn (7) *Chairman & Chief Executive Officer of the Managing Board, SABIC EuroPetrochemicals*
 R. Paiella (8) *Director, Elastomers and Styrenics Division, Polimeri Europa*
 Ph. Pôlet (9) *General Manager, LVM*
 D. C. Rolph (10) *Executive Vice-President Polyolefins, Borealis*

TREASURER

- J.P. Pleska *Managing Director - SBU Vinyls, Solvay*

STEERING COMMITTEE:

- (1) as from May 2002 – (2) until May 2002 – (3) as from May 2002 – (4) until May 2002 – (5) as from December 2002
 (6) until September 2002 – (7) until July 2002, DSM: President Polypropylenes – (8) until September 2002
 (9) as from December 2002 – (10) as from December 2002

STEERING COMMITTEE WORKING GROUPS:

COMMUNICATIONS & INDUSTRY ISSUES

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J. Dahmer (3) *Managing Director Business Group Plastics, Bayer*

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M. Magnini (5) *Managing Director, Polimeri Europa*

P.J.F. Miller (6) *Chief Executive Officer, Bakelite*

H. Noerenberg (7) *Managing Director, Business Group Polyurethanes, Bayer*

F.H.M.A. Noteborn (8) *Chairman & Chief Executive Officer of the Managing Board, SABIC EuroPetrochemicals*

Ph. Pôlet *General Manager, LVM*

M. Pugh (9) *Vice President, Managing Director for Europe, NOVA Chemicals*

D. C. Rolph *Executive Vice-President Polyolefins, Borealis*

J. San Pedro *Managing Director Europe, Middle East and Africa, Voridian*

(1) May 2002 - October 2002 - (2) until April 2002 - (3) as from December 2002 - (4) until January 2002 - (5) until January 2002
(6) as from May 2002 - (7) until September 2002 - (8) until July 2002, DSM: President Polypropylenes - (9) as from December 2002

TECHNICAL, ENVIRONMENT AND HEALTH "TEC-H"

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Ch. Churet (1) *Commercial Director, DOW Europe*

W. Prätorius (2) *President Petrochemicals Division, BASF*

VICE CHAIRMAN

R. Paiella (3) *Director, Elastomers and Styrenics Division, Polimeri Europa*

MEMBERS

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R. Bornhofen *President, Vestolit*

Q. de Borrekens (4) *President Polypropylene, ATOFINA*

K.T. Glover (5) *Vice President Polyolefins Europe, ExxonMobil Chemical Europe*

D. McFall *Vice President Europe, Packaging & Industrial Polymers, Dupont de Nemours International*

M. Paravidino (6) *Director, Polyethylene Division, Polimeri Europa*

D. Price (7) *Polyethylene Commercial Manager for Europe, Middle East & Africa, ExxonMobil Chemical Europe*

(1) as from May 2002 - (2) until May 2002 - (3) until September 2002 - (4) as from May 2002
(5) until June 2002 - (6) as from December 2002 - (7) as from December 2002



APME STANDING COMMITTEES

Standing and Product Committees manage issues related to safety, health and environment, product stewardship, European regulation, fair treatment of plastics and communications to others about the industry.

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



FIRE SAFETY COMMITTEE

In 2002, this committee mainly contributed, in close co-operation with other associations involved in the plastics chain, to the regulatory and harmonisation processes at EU level relating to fire hazards of products in their intended end-use conditions.

Special attention was given to the Council of European Normalisation (CEN) standardisation, implementation of the Euroclasses system by Member States, new fire testing scenarios, environmental impact of fires and fair treatment of plastics products.



Among other activities, it is also worth to mention the involvement of FSC members in the APME/EuPC Fire Safety and Plastics Products for Construction Conference.

Chair:

R. Dewitt, Solvay

Deputy Chair:

C. Lukas, DOW Europe

FOOD CONTACT COMMITTEE

Towards the end of 2002 the committee worked on the first amendment of Directive 2002/72/EC (which is the consolidated "old" directive 90/128/EEC). The EU Commission is also preparing a new directive which incorporates Directive 2002/72/EC and all the food contact directives (including those on migration testing, vinyl chloride monomer and food simulants) and which will have a number of new principles such as food type reduction factors, multilayers, functional barriers, traceability, compliance, labelling. Legislation on recycling plastics for food contact applications and active and intelligent packaging started to be discussed with the Commission towards the end of 2002. The committee liaises with CEFIC, CEPE, EuPC and CIAA on issues of common concern.

A number of sub-committees have been working on pharmacopoeia (Council of Europe), analytical methods (CEN and European Commission) and materials in contact with drinking water (European Commission's harmonisation project under the Construction Products Directive).

Chair:

C. Guéris, DuPont de Nemours International

Deputy Chair:

B. Brands, DOW Europe





PET COMMITTEE

Chair:

A. Ciotti, DOW Europe

Member companies:

DOW Europe,
DuPontSA, KoSa, Brilén¹, V.P.I.²,
Italpet Preforme, Voridian, Wellman,

¹ as from July 2002 – ² as from January 2003



POLYSTYRENE COMMITTEE

Chair:

B. Nusbaumer, ATOFINA

Member companies:

DOW Europe, Kaucuk, BASF, ATOFINA, Polimeri
Europa, BP, NOVA Chemicals



EPOXY RESINS COMMITTEE

Chair:

J.A. Merino, DOW Europe¹
J. Zeinstra, Vantico²

Member companies:

DOW Europe, Ems-Primid, Vantico, Bakelite, Solutia,
Sir Industriale, Resolution Performance Products

¹ until January 2002 – ² as from February 2002



POLYCARBONATES / BPA COMMITTEE

Chair:

B. Richter, Bayer

Member companies:

DOW Europe, Bayer, General Electric Plastics

APME PRODUCT COMMITTEES

Product Committees 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 customer industries, interest groups, and the wider international plastics community.

POLYOLEFINS COMMITTEE

Chair:

K. Abbàs, Borealis

Member companies:

Basell Polyolefins, ExxonMobil Chemical Europe,
DOW Europe, Borealis, REPSOL YPF, ATOFINA,
Polimeri Europa, DSM, BP



EXPANDABLE POLYSTYRENE COMMITTEE

Chair:

D. Lausberg, BASF¹
P. Ayrey, NOVA Chemicals²

Deputy Chair:

G. Suess, BASF²

Member companies:

Sunpor Kunststoff, Gabriel Technologie, DOW Europe, Kaucuk, BASF,
REPSOL YPF (Polidux), Styrochem Finland, Monotez, Polimeri Europa, BP,
NOVA Chemicals

¹ until June 2002 – ² as of June 2002



FLUOROPOLYMERS COMMITTEE

Chair:

J.V. Sullivan, Dyneon

Member companies:

Solvay, ATOFINA, Ausimont¹, DuPont de Nemours
International, Dyneon, Asahi Glass Fluoropolymers

¹ until end 2002 / acquired by Solvay



ABS/SAN COMMITTEE

Chair:

M. Tincani, Polimeri Europa

Deputy Chair:

M. de Braaf, DOW Europe

Member Companies:

DOW Europe, BASF, Bayer, REPSOL YPF (Polidux),
Polimeri Europa, General Electric Plastics



VINYLS COMMITTEE / ECVM

Chair:

Jean-Pierre Pleska, Solvay (until April 2002)

David Thompson, EVC International (as of April 2002)

Member companies:

ARAGONESAS (Aiscondel), ATOFINA, Cires, EVC International, LVM, Norsk Hydro, Shin-Etsu PVC, SOLVIN, Vestolit, Vinnolit



The Vinyls Committee is the board of the European Council of Vinyl Manufacturers (ECVM), which represents the ten leading PVC producers accounting for 98 per cent of European PVC resin production.

Further development of the Vinyl 2010 initiatives included support to several innovative waste management projects:

The trial programme at the Stigsnaes plant in Denmark has been successfully completed. It proved the feasibility of this new technology to treat PVC waste, based on a combination of hydrolysis and pyrolysis. The owner of the plant (RGS 90, the largest waste management company in Denmark) has decided to go ahead with substantial investments in order to adapt the plant for the commercial implementation of the new technology. A grant from the EU "Life" programme has been obtained, and Vinyl 2010 has decided to also provide financial support. It is expected that the modified plant will be operational in Q3/2004.

An eco-efficiency study has been commissioned by Vinyl 2010 and carried out by PE Europe to compare various recovery options, using mixed cable waste as the reference material. The main conclusion was that all the four considered recovery processes (a modern incinerator with HCl recovery, the Stigsnaes process mentioned above, an alternative feedstock recycling technology developed by Watech and the Vinyloop® mechanical recycling technology developed by Solvay) are preferable to landfill.

The Vinyloop process achieves the best position from a material and energy recovery point of view, followed by the two feedstock recycling processes (both having a very similar rating overall) and the incinerator in the third position. The report highlighted however that for selecting a recovery technology it is also essential to take into account specific national- or local- conditions, which can have a significant impact on the conclusions.

The first commercial Vinyloop plant built in Ferrara (Italy) with support from Vinyl 2010, started up in February 2002. It confirmed that this novel technology works and that the recycled product from cable waste can replace virgin PVC compound. Most teething problems were overcome and nominal capacity should be achieved by the end of 2003. Meanwhile, R&D has successfully progressed at Solvay to adapt the technology to other challenging types of PVC waste (flooring, coated fabrics).

The new partnership between Vinyl 2010 and ACRR (Association of Cities and Regions for Recycling) was launched in January 2002, with the aim to promote the recycling of plastic waste in cooperation with local authorities. Two pilot projects were started, one in Catalonia, the other in the Porto urban area. The learning points will be included in a best practices guide developed by ACRR for local authorities throughout Europe.



MEMBERSHIP STATUS



A Sunpor Kunststoff	GR Monotez
B Basell Polyolefins	I Ausimont (2)
ExxonMobil Chemical Europe	Italpet Preforme
Gabriel Technologie	Lonza
LVM	Polimeri Europa
PolyOne	SIR Industriale
Solvay	
CH DOW Europe	N Norsk Hydro
DuPont de Nemours International	Reichhold
EMS-PRIMID	NL DSM/SABIC EuroPetrochemicals (3)
Vantico	Eastman Chemical (Voridian)
CZ Kaucuk	EVC International
Spolana *	General Electric Plastics
	Resolution Performance Products
D Bakelite	Shell Chemicals Europe
BASF	Shin-Etsu PVC
Bayer	Wellman
Dyneon	
KoSa	P Cires
Solutia	PL Anwil * (4)
Vestolit	SK Novacke *
Vinnolit	
DK Borealis	UK Asahi Glass Fluoropolymers UK
E Ashland Chemical Company	BP
Aiscondel	DuPontSA
Brilén (1)	NOVA Chemicals
REPSOL YPF	Resinous Chemicals (4)
	Scott Bader
F ATOFINA	
FIN Styrochem Finland	

* Associate members

(1) Member as from July 2002 (2) Member until end 2002/acquired by Solvay

(3) SABIC purchased in June 2002 participating business from DSM (4) Member until end 2002

New members as from 2003: V.P.I. (GR), Chemopetrol (CZ)

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APME SECRETARIAT

PICTURE : From left to right:

Laurence Vermeersch - Neil Mayne - Russel Mills - Nancy Russotto - Herbert Fisch - Sonja Célis - Jean-Pierre De Grève (ECVM) - Yvonne Barcelona - Laurent Deramaix (ECVM) - Caroline Dubois - Anne Meysmans - Jean Schoemans - Dominique Zimmerman - Vanessa Hum - Gaëtane Bellefroid (ECVM) - Axel Kistenmacher - Anne-Marie Hamelton - Arjen Sevenster (ECVM) - Georges Ransbotyn - Noelle Tracey (ECVM) - Claudine Coulon - Bianca Ninanne - Martyn Griffiths (ECVM) - Tanguy Brasseur

MISSING:

Suzy Crosiers - Martine François - Nadine Rubbens - Hanane Taidi

SECRETARIAT

APME DIRECTORS

Nancy Russotto	<i>Director General</i>
Neil Mayne	<i>Head, Technical and Environmental Centre</i>
Herbert Fisch	<i>Director, Technical and Environmental Centre (1)</i>
Axel Kistenmacher	<i>Director, Technical and Environmental Centre (2)</i>
Freddy Maréchal	<i>Director, Technical and Environmental Centre (3)</i>
Jean Schoemans	<i>Director, Technical and Environmental Centre (4)</i>

Yvonne Barcelona *Director, Communications*

Jean-Pierre De Grève *Director, ECVM*

(1) until April 2003 – (2) from December 2002 – (3) until December 2002 – (4) from March 2003

APME EXECUTIVES

Anne-Marie Hamelton	<i>Manager</i>
Russel Mills	<i>Manager</i>
Georges Ransbotyn	<i>Manager</i>
Martine François	<i>Office Manager</i>



Photo by J-D Burton



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