



THE EUROPEAN PETROCHEMICAL ASSOCIATION NEWSLETTER

Report on 34th Annual Meeting Monte Carlo 1-3 October 2000



Introduction - "Building Respect"

The EPCA's 34th Annual Meeting was held in Monte Carlo on 1-3 October 2000. Opening proceedings, EPCA President Dr. W. Dominique Cruyt of ATOFINA stated that this year's event was the largest ever EPCA gathering. Official attendance for the meeting was 1,735 people, of which 1,475 were delegates.

Like attendances at EPCA Annual Meetings, the petrochemical industry continues to grow. However, industry growth for growth's sake is no longer acceptable, pointed out Dr. Cruyt. The needs of all the stakeholders in the chemical production chain - including shareholders, consumers, business partners, citizens, governments and employees - need to be reconciled under the banner of sustainable growth. The question for the new millennium, and for the speakers at the 34th Annual Meeting, is whether or not sustainable growth can be maintained in a way that satisfies the various stakeholders' requirements.

By meeting this challenge successfully, the petrochemical industry can dispel the deep-rooted public suspicion of chemicals as substances which pollute and pose a risk to health. In achieving sustainable growth, the industry can enhance its image, create value and build respect amongst all its stakeholders. It was for this reason, said Dr. Cruyt, that EPCA had chosen "Building Respect" as the theme for the 34th Annual Meeting.

Of all the possible definitions for "sustainable growth", perhaps the most relevant for the global chemical industry at the beginning of the new millennium is "growth which meets today's expectations without compromising future generations", the EPCA President told delegates in his opening remarks. The father of modern chemistry, Dmitri Mendeleev, obviously had sustainable growth in mind when he reported back to the Tsar from the oil fields of Pennsylvania in 1892: "This petroleum is much too valuable to burn. Mankind would be better served if it were used solely as a feedstock in the formulation of valuable byproducts."

Introducing four very different views

In introducing the moderator for the 34th Annual Meeting, Dr. Dominique Cruyt welcomed back a good friend of EPCA. He remarked that Michael Buerk, the well-known BBC TV news anchorman and journalist, was well placed to chair a session on sustainable development. Amongst Mr. Buerk's extensive work on green issues, his "Poisoned Inheritance" programme on the environmental destruction of Poland, shown 10 years ago, still stands as a landmark piece of television journalism on the subject. Michael Buerk mentioned that the four keynote speakers he was about to introduce would bring their own unique view to the subject of sustainable growth and building respect for the industry. Leading figures in their respective fields - of chemical manufacture, academia, management consultancy and government, the speakers were chosen to bring four fresh and very different views of sustainable growth to an eager audience at the 34th Annual Meeting.

Enhancing products, and human wellbeing

The first speaker, Dr. Jürgen Hambrecht, Member of the Board of Executive Directors with BASF in Germany, showed, by means of one of his own company's advertisements, that the chemical industry serves to make products utilised by man better and, thus, enhances lifestyles. The industry has a good story to tell but, in general, has failed to communicate the benefits it has brought to mankind. In the public eye the favourability rating of the chemical industry is only slightly ahead of nuclear power and less than one-half that of telecommunications. It is incumbent upon chemical producers, said Dr. Hambrecht, to

build respect at stakeholder level. With the 21st century challenges of a growing population, a changing biosphere, limited natural resources and the march of globalisation, not to mention the increasing expectations of the stakeholder base, this will not be an easy task.

In his presentation, entitled "Petrochemical Industry Growth and Continuous Contribution to the Development of Human Wellbeing", Dr. Jurgen Hambrecht pointed out that over the last 10 years the chemical industry has been restructured to increase profitability. Furthermore, petrochemical production will grow approximately 1.5 times faster than world GDP over the next 10 years. Despite such positive developments, chemical company shares are underperforming on the stock market. This indicates that investors have doubts about the sustainability of the chemical industry, and is also a reflection of the attractiveness of the strong performers in the so-called "new economy", notably, telecommunications, e-commerce and IT. The fact that the 10 largest chemical companies only account for 15 per cent of the total global market shows that there is room for considerable further rationalisation of the industry.



The chemical industry has a key role to play in facing up to the challenges humankind is confronted with at the start of the 21st century, said Dr. Hambrecht. It must take the opportunity to support and promote scientific advances and to be more effective in communicating its role to its stakeholders. For example, with world population scheduled to increase from its present level of 6 billion to 8 billion by 2020, health and nutrition will grow in importance. New developments in biotechnology will be needed to cope with a doubling in the demand for food over the next 30 years. One of the greatest challenges facing the chemical industry is that posed by health care and, in this respect, significant developments are expected in the fields of gene therapy, nutraceuticals and high-performance polymers.

Energy conservation and reductions in ozone-depleting emissions are also important focal points for chemical industry researchers. For example, new insulation materials are permitting the construction of homes which are 10 times more energy-efficient than traditional designs. The so-called 3-litre house requires only 3 litres of fuel per square metre of floor space per annum to heat. Motor vehicles are the biggest consumers of petroleum in industrialised nations, and here the chemical industry is working to reduce vehicle weight through the use of new materials and to increase fuel efficiency. In addition, work is underway on new drive concepts, such as methanol-based hydrogen propulsion.

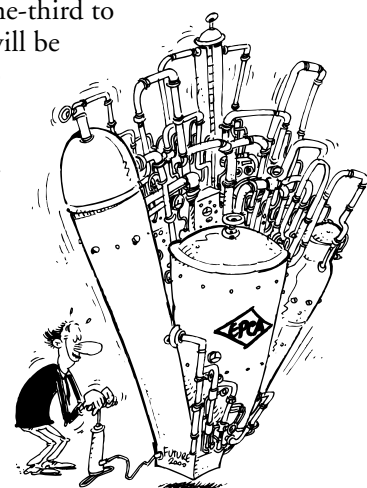
Sustainable development and integrated waste management planning have become criteria which underpin virtually all chemical industry operations and investment decisions. For example, since 1990 the BASF complex in Ludwigshafen has succeeded in reducing water emissions by 40 per cent, air emissions by 44 per cent, landfill by 84 per cent, noise by 52 per cent and greenhouse gases by 76 per cent per tonne of chemical produced. The German chemical industry as a whole is aiming for a further 28 per cent reduction in greenhouse gases by 2005, asserted Dr. Hambrecht, and is opposed to EC proposals for emissions trading at a company level.

In summary, the BASF speaker said that the chemical industry needs to break free of its historical engineering-based production past and to grasp the opportunities offered by today's challenges. By using new technology to improve profitability whilst achieving sustainable growth, the industry can promote itself to its stakeholders as part of the solution, rather than be regarded as part of the problem.

Crunch time for the environment

A rather more sobering scenario was painted by the next speaker, Thomas N. Gladwin, PhD, Max McGraw Professor of Sustainable Enterprise & Director Corporate Environmental Management Program, University of Michigan Business School in the US, in his presentation "The Paradigm Shift from Greening to Sustaining: How to Become a Sustainable Enterprise". Professor Gladwin stated that too many business strategies have been developed in isolation, with little thought for their impact on the global ecosystem. Rather than base his presentation on a growth scenario, as did Dr. Hambrecht, Professor said that his remarks would be dictated by the logic of limits, softer values and the optimum route to sustainable enterprise.

Every part of the ecosystem is in decline, Professor Tom Gladwin told EPCA delegates. After dropping marginally over the previous 900 years, the average world temperature has increased 0.6°C since 1900. The 1990s was the warmest decade on record and 1998 was the warmest year ever. Some scientists are predicting a rise in average global temperatures of 1.9-2.9°C over the next century, an increase which would push sea levels 38-46 cm above the existing mark. On the basis of current trends, one-third to two-thirds of all species will be extinct by 2050, while 15 per cent of the world's arable land has been lost since 1985. Groundwater is diminishing everywhere, and 2.3 billion people worldwide are short of water. Furthermore, 70 per cent of oceanic stocks are overfished.



Professor Gladwin added a few more depressing statistics before moving on to look at the challenges facing business. Of the 6 billion people on the planet, 0.5 billion earn less than US\$1 per day. The richest one-fifth of the people are 74 per cent wealthier than the bottom one-fifth. In addition, urbanisation continues apace. By 2025 some 60 per cent of the population will live in cities, as opposed to less than 30 per cent in 1950 and 47 per cent today. With living systems in decline and global population increasing, the tunnel of opportunity through which mankind must squeeze in order to reach a better tomorrow is getting narrower all the time. The answer, said Tom Gladwin, lies in innovation, carried out in a sustainable, socially just manner.

Sustainability means a shift to biologically inspired production models. By basing the design of industrial systems on how natural systems work, it will be possible to utilise all wastes that are generated and to achieve a dramatic increase in productivity. This makes it possible to live off the income derived from "natural capital" and to enable this natural capital to be reinvested. The adoption of such an environment-friendly, sustainable approach will yield benefits, not least in terms of reduced insurance costs and increased loyalty from a wider stakeholder base.

This sustainable future cannot be achieved without the vision of senior industry leaders, maintained Professor Gladwin. Politics will play a role but industry must forge the path through this diminishing tunnel of opportunity. Senior executives must set the context for sustainable developments, train managers and give direction. They must assess their portfolios, build the relevant business cases and ensure partnership opportunities are maximised. Tom Gladwin pointed to certain companies, such as Monsanto, Dow, Proctor & Gamble, Ford, Du Pont, Shell, Johnson & Johnson, General Motors and BP, which are taking the steps necessary to become leaders of sustainable development. It is from the boardrooms of companies such as these that next generation of heroes is emerging.

The long boom - halfway to a better tomorrow

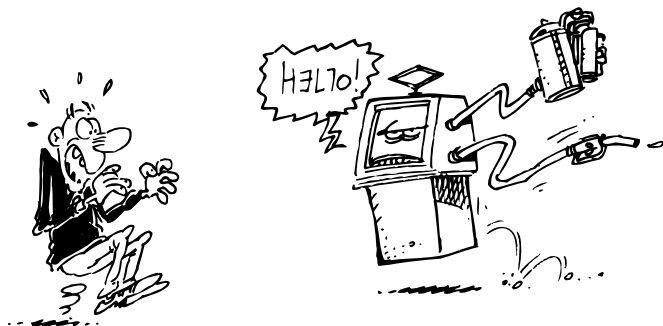
A much more optimistic, almost utopian, vision was presented by the next speaker, Peter Schwartz, cofounder and Chairman of Global Business Network in the US. While this brighter future is ultimately dependent on a number of imponderables, not least many politicians making the right decisions, the basic building blocks are already in place, Peter Schwartz told EPCA delegates. As described in his book, "The Long Boom", the process of change, towards a new Information Age, began in 1980 and should be basically complete by 2020.



Whereas the last great wave of technology-based economic growth, in the 1950s and 1960s, involved 500 million people in North America, Europe and Japan, the current phase involves 3-4 billion people worldwide. The US economy is booming, Europe has created a single market and Asia has rebounded after the relatively minor inconvenience of the 1997 economic crisis. Alterations to political and regulatory systems after the latter event should ensure that future financial crises in Asia cause even less disruption. Latin America is also participating in the new growth phase, said Peter Schwartz, and within 10-15 years Russia should have emerged from its painful transition to democracy. Only Africa seems impervious to this ground-breaking wave of change.

In the current boom, growth is driven by the new economy and information technology. It began in 1980 with the introduction of the personal computer and the rise of telecommunications. While the new economy creates wealth, it does not harm the environment. Also, levels of violence, in general, are decreasing and there has been a move away from entrenched power bases. The end of the Cold War a decade ago has made globalisation possible, and there has been wide acceptance of the market economy approach.

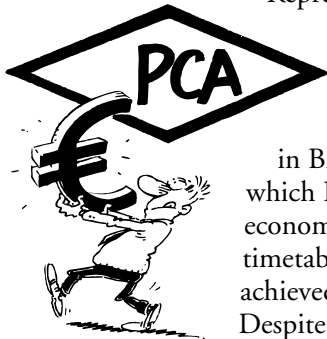
By removing space and time constraints, the worldwide web has created an infrastructure for commerce which is universally available at virtually no cost. The availability of a new type of capital - venture capital - has made this transformation to a network economy possible. The opportunity to start new businesses is greater than ever before. Those countries which have invested in education and have been most open to change have derived the greatest economic benefit.



In addition to deriving benefits from strong economies and open markets, mankind will be at the receiving end of some remarkable scientific developments over the next two decades, suggested Peter Schwartz. Advances in biotechnology will lead to cures for virtually all known diseases, while the ability to grow replacement human organs is within our grasp. Even now, experts in nanotechnology are experimenting with creating machines using atoms as the basic building blocks. The traditional internal combustion engine will, in time, be replaced by clean-burning hybrid and fuel cell-powered vehicles, allowing petroleum to be used primarily as a petrochemical feedstock. Chemistry itself is in line for fundamental changes, with the emergence of molecular mechanics and electromechanical chemistry enabling the precise design of chemical bonds and leading to less energy-intensive and less polluting processes.

Even allowing for the foibles of the odd rogue politician, there is a strong consensus on the direction our global economy should be heading, concluded Peter Schwartz. Our world should be a richer, safer, healthier and cleaner place in 20 years time.

Europe - is it changing fast enough?



Representing government, specifically European government, Peter Praet, Chef de Cabinet to the Belgian Minister of Finance in Brussels, found the heights which Peter Schwartz's global economy will reach, and the timetable in which they will be achieved, somewhat optimistic. Despite the great progress made with the European Union, and the fine

example which it sets, the final EPCA speaker said that Europe still retains a village culture and is less cosmopolitan than the US. While there is much more freedom in contracting arrangements in the US, Europe labours under regulations which limit contractual innovation. In addition, said Mr. Praet, Europe is less willing to take risks than the US. There is a danger this stability which Europeans favour can become rigidity during times of rapid change.

By means of very restrictive monetary policies throughout the region in the 1990s, Europe had achieved a good degree of fiscal homogeneity by the time the euro was introduced two years ago. Price stability is the dominant goal of the European Central Bank, and the traditional methods for governments to manipulate their way out of economic crises - altering interest rates and devaluing currencies - are actively discouraged in the new Europe. Because the option for individual states to devalue is removed with the euro, private sector management is obliged to ensure rigorous financial control of their companies' activities and to instil a sense of common purpose amongst the workforce. The threat of hostile takeovers remains a good safety valve for ensuring the proper management of companies.

Another fundamental change, which is being accelerated through the introduction of a single currency in Europe, is the surge of the stock market culture. This has meant a move away from bank financing to the capital markets. The greater degree of transparency attendant on these developments is also apparent in the way public companies are now being run.

The end result of all these fiscal and business developments is that the historically conservative European cultures are changing. However, Peter Praet believed that these changes are not happening fast enough. The diffusion of the new technologies is variable across the region, and this has a disruptive effect. The recent Danish rejection of the euro in a public referendum highlights the difficulties associated with maintaining a delicate balance between regional

cooperation and the autonomy of individual member states. It also shows how the community needs to work at political union in a pragmatic way to ensure success for European monetary union.

General Committee elected

At the EPCA Ordinary General Meeting on 2 October the following members were either re-elected or elected to the EPCA General Committee for a one-year term:

Dr. W.D. Cruyt, Belgium, ATOFINA (EPCA President); Dr. W. Thünker, Germany, Veba Oel (EPCA Vice-President); Mr. O. Tangeraas, Scandinavia, Odfjell (EPCA Treasurer); Mr. Th. Walthie, Switzerland, Dow; Mr. J-H. Kruit, Netherlands, DSM; Mr. E. Locutura, Spain, Repsol; Mr. A. Polito, Italy, EniChem; Mr. M. Schuller, France, ATOFINA; and Mr. R. Willems, UK & Singapore, Shell Chemicals.

Ex-officio co-opted General Committee members are: Mr. P.P. Evertse, ExxonMobil Petroleum & Chemical (EPCA Logistics Committee Chairman); Mr. A. Perroy, CEFIC; Mr. U. Sternfels, NPRA; and Mr. A. Gatti, APLA.

The Ordinary General Meeting set the following membership fees for 2001:

Full Member: 1165 Euro

Associate Member: 1116 Euro

Joint EPCA/ECTA Member: 675 Euro

Eastern European Member (for the first five-year period of membership): 675 Euro; Joint EPCA/ECTA Member from Eastern Europe (for the first five-year period of joint membership): 400 Euro

