



Fourth Bruges European Business Conference

# EUROPE AS A LOCATION FOR INDUSTRY AND INNOVATION

23 April 2013 **Bruges Campus** 

In partnership with

Deloitte.



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# "Europe as a Location for Industry and Innovation" 23 April 2013, College of Europe, Bruges

The purpose of the conference was to explore the themes of competitiveness and innovation and how Europe can become a more attractive location for manufacturing. Innovation and competitiveness are key factors for sustainable growth, which is the only long-term solution to the current economic crisis.

The opening high-level plenary session on competitiveness and attractiveness of Europe as a location for industry featured the Member of the European Commission responsible for Regional Policy, **Johannes Hahn**, Deloitte Global leader for the Manufacturing Industry **Tim Hanley**, BusinessEurope's Deputy Director-General for Industrial and International Affairs **Adrian van den Hoven** and Commission's Senior Economist **Tomas Brännström** (DG ENTR).

In the afternoon, three simultaneous, sector-based workshops examined in depth various factors that contribute to competitiveness in the chemical, automotive and pharmaceutical industries.

Conference materials, including presentations and session summaries can be accessed at: <a href="https://www.coleurope.eu/4thbusinessconference">www.coleurope.eu/4thbusinessconference</a>

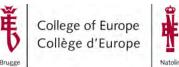
The speech of Commissioner Johannes Hahn is available at the Europa.eu website: <a href="http://europa.eu/rapid/press-release">http://europa.eu/rapid/press-release</a> <a href="https://europa.eu/rapid/press-release">SPEECH-13-345</a> <a href="en.htm?locale=en">en.htm?locale=en</a>

The Bruges European Business Conferences, organised in partnership with Deloitte, are a natural complement to the College's innovative Master programme 'European Economic Integration and Business'.

The summaries of the proceedings of the plenary session and the workshops have been prepared under the responsibility of the College of Europe by the following EEIB students: Edita Bezegova, Ward Dendievel, Donatien Depuydt and Nuray Nalli. The College gratefully acknowledges their contribution.

The summaries are intended for information purposes only and should not be considered as precise quotations of the views expressed by the speakers.

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# Fourth Bruges European Business Conference: "Europe as a Location for Industry and Innovation"

# **Programme**

Timing	Session	Chair	Speaker(s)
9:15-10:00 Room A/B	Registration		
10:15 Room E	Welcome	-	Paul Demaret, Rector, College of Europe
10:30- 12:30 Plenary session Room E	Industrial competitiveness of Europe today and tomorrow With extended Q&A session	Phedon Nicolaides, Director of the Department of European Economic Studies, College of Europe	<ul> <li>Johannes Hahn, European Commissioner for Regional Policy – Opening address</li> <li>Adrian van den Hoven, Deputy Director General and Director for Industrial and International Affairs, BusinessEurope</li> <li>Tim Hanley, Global Leader, Manufacturing Deloitte Touche Tohmatsu Limited</li> <li>Tomas Brännström, Senior Economist, DG ENTR, presenting the EU's position in Key Enabling Technologies (KETs)</li> </ul>
12:30- 14:00 Room A/B	Lunch		
14:00- 16:00 Workshop Room G	Chemical Industry workshop: European Chemical Industry: the source of innovation, the force for competitiveness?	Yves Verschueren, General Manager, Essenscia	<ul> <li>Willem Huisman, Chairman of the Board of Directors and President of Dow Benelux</li> <li>Stefan Van Thienen, Chemical Industry Partner, Deloitte</li> <li>Otto Linher, Deputy Head of Unit, Chemicals Industry, DG ENTR</li> <li>Karin Markides, President of Chalmers University of Technology, Sweden</li> </ul>
14:00- 16:00 Workshop Room D	Pharmaceutical Industry workshop: Innovation and Competitiveness of Pharmaceutical Industry in Europe	Donald Niesten, Pharma Business Sector Leader, Deloitte	<ul> <li>Xavier Hormaechea, Director, Public Affairs, UCB</li> <li>Richard Torbett, Chief Economist, EFPIA</li> <li>Thomas Heynisch, Deputy Head of Unit, Food and Healthcare Industries, Biotechnology, DG ENTR</li> <li>Joanna Chataway, Director, Innovation and Technology Policy, RAND Europe</li> </ul>
14:00- 16:00 Workshop Room E	Automotive Industry workshop: Future of the Automotive Industry in Europe, Competitiveness, Innovation and Impact on Suppliers	Eric Desomer, EMEA Automotive Industry Leader, Deloitte	<ul> <li>Yves Toussaint, General Manager, Green Propulsion</li> <li>Michal Kadera, External Affairs Director, Škoda-Auto</li> <li>Paul Nieuwenhuis, Co-Director, Centre for Automotive Industry Research, Cardiff Business School</li> <li>Björn Willemsens, Automotive Industry Director, Deloitte</li> </ul>
16:00	Closing		





### Plenary session

### Industrial Competitiveness of Europe Today and Tomorrow

After the welcoming address of the Rector, **Paul Demaret**, **Phedon Nicolaides**, Director of the Department of European Economic Studies at the College of Europe opened the session with the question "why is Europe not the most competitive location in the world"? The EU, as a whole, lags behind the US in terms of competitiveness while only some EU Member States achieve a high global ranking.

With a call for closer engagement between business and EU policymakers, the keynote speaker, **Johannes Hahn**, Member of the European Commission responsible for Regional Policy, outlined the efforts of the Commission to support competitiveness programmes. He stressed the role of EU2020 strategy and regional policy in fostering competitiveness. Within the EU2020 strategy, the EU can strengthen its social and economic infrastructure to foster business and innovation and highly skilled human force. This strong foundation should attract investments. However, the capacity of regional policy to become a platform for making EU regions more competitive and attractive to business can be enhanced with the following reforms:

- 1. Regional policy must be aligned with the EU2020 strategic goals and must aim at smart and sustainable growth. 30% of allocated resources have to go to R&D, ICT and low carbon economy technology.
- 2. Ex ante conditionality: Regions will need to have an innovation strategy for smart specialization before any funding. The aim is that the right environment will be created for efficient and effective research and innovation actions. The problem of the EU is not the availability of research spending, but rather the insufficient commercialization of research results.
- 3. Regions should focus on energy efficiency and key enabling technologies to reduce energy consumption and dependence on raw materials.

The Commissioner concluded by highlighting the efforts of the Commission, in cooperation with Member States, to promote smart and clean technologies as a main driver of innovation.<sup>1</sup>

The speech of **Adrian van den Hoven**, Deputy Director-General of Business Europe reflected the view of business on EU as a place for manufacturing and on the competitiveness and attractiveness of the EU. A more industry-oriented policy should be on the agenda of the countries affected by the current economic crisis. The main challenge is the state of **the infrastructure** in which business operates. This challenge is intensified by the budget cuts of the EU. He argued that while the EU talks about competiveness, it at the same time cuts the budget for actions that support competitiveness.

<sup>&</sup>lt;sup>1</sup> See http://ec.europa.eu/enterprise/policies/industrial-competitiveness/amt/index en.htm

Another driver for business is the **EU Industrial policy**, aiming at a target of 20% of the EU's GDP. The challenge here is that industrial policy does not receive the same priority because it is considered less important than other policy areas. Good initiatives are proposed by some services of the Commission but other services of the Commission may even oppose them. There is also the impression that the EU addresses problems through more regulation so that the end result is overregulation.

In response to a question concerning the impact of the precautionary principle and risk-based regulation in the EU, Mr van den Hoven pointed out to the conservative attitude of the EU towards risk. It acts as an obstacle to businesses seeking to commercialise innovative ideas and encourages them to leave the EU.

**Tim Hanley**, Global Leader of Manufacturing at Deloitte Touche Tohmatsu Limited, gave an overview of Deloitte's report on competitiveness. Among the key issues for the EU is the fact that as emerging countries transform into manufacturing economies they attract FDI in advanced manufacturing that was once destined mainly for Europe. Manufacturing matters because of the credible correlation between the economic development of a country and its advancement on the ladder of manufacturing capability. As for the drivers of global manufacturing competitiveness (based on CEOs perception), the following appear to be important: access to innovation and highly skilled labour; public policy (government actions on the demand side pushing for more innovation); extensive trade flows; future middle class with substantial purchasing power; modern infrastructure and low costs - both of labour and of material resources, and clean energy.

There are reasons for optimism for the EU as it scores well on:

- High rate of skilled researchers;
- High ranking in innovation index;
- High labour productivity. Although the EU has high labour costs, it scores high on labour productivity, compared to the low labour costs but also low labour productivity in China.

**Tomas Brännström**, Senior Economist, DG Enterprise and Industry, defined key enabling technologies and explained the Commission's position on these kind of technologies. Key Enabling Technologies (KET) comprise different style of manufacturing, requiring high R&D, capital and labour-intensive methods and innovation.

Among the main challenges for the EU is the commercialisation of the products based on KET: EU has a decreasing trend of patent applications and the gap between the East Asia (number 1 in patent applications) and EU is increasing in relative terms.





# **Chemical Industry Workshop**

# European Chemical Industry: the source of innovation, the force for competitiveness?

The workshop on the chemical industry examined the sources of innovation and competitiveness forces in Europe.

**Yves Verschueren**, General Manager at Essencia (the Belgian Federation for Chemistry and Life Sciences Industries), was the chairman of the session. He introduced the session by remarking that Europe used to be the incontestable leader in chemical industry, but it seemed that this was not the case anymore.

He gave the floor to **Willem Huisman**, Chairman of the Board of Directors and President of Dow Benelux that employs approximately 1900 people in Belgium and the Netherlands. He emphasized Dow's importance in terms of employment. Apparently, every additional employee in Dow creates 8 to 9 indirect jobs in the region.

He pointed out the reliance of the chemical industry on energy prices. Chemical companies need affordable energy prices to compete worldwide and to survive. He admitted that Dow's decisions concerning plant location are partially driven by local energy prices. He raised the issue of shale gas and its consequences for companies in Europe. Because of the shale gas revolution in the US, renewable energies have become inefficient and the price of coal has declined. He called for a more active EU policy strategy regarding shale gas.

**Stefan Van Thienen**, Partner in charge of Chemical Industry at Deloitte, presented the growth opportunities in the European chemical sector. During the 20th century, new molecules and materials were the main sources of value creation. However, the market has changed and it is not the case today. He presented global megatrends and unmet needs in the market. He argued that companies could benefit from these opportunities by developing solutions rather than science or material-driven innovation. Chemical companies must rethink their value process to be more end-market oriented.

**Prof. Karin Markides**, President of Chalmers University of Technology in Sweden, presented her vision on the role of universities in assisting the development of the chemical industry. She explained the work that has been accomplished by the Chalmers University of technology in Sweden. It is a public-private University aiming to be a centre of excellence in soft biomaterials. The successful collaboration of the University with the local chemical industry led to the creation of a cluster in Gothenburg – the Science Park. Chalmers University attracts and gives excellent training to talented students coming from all over the world. The best students receive usually job offers form chemical companies after their studies. This is a practical example of synergies between universities and the private sector.

Finally, **Otto Linher**, Deputy Head of Unit for the Chemical Industry in DG ENTR at the European Commission, concluded the session. He underlined the fact that chemicals are the basis for many traded goods. According to him, the EU chemical industry is still competitive, even though Europe is not the worldwide centre it was before. The strengths of the EU chemical sector are infrastructure, know-how and an integrated value chain. He accepted however



that the EU should improve the transition from R&D and innovation to commercialisation. An enhanced internal market, better access to finance and more educated human capital are the solutions to boost the industry.

**Yves Verschueren** concluded by stating that it was our responsibility to make sure that we attracted more talented people, that regulators understood our needs and that people appreciated the value of the chemical industry for the entire society.

# **Pharmaceutical Industry Workshop**

# Innovation and Competitiveness of Pharmaceutical Industry in Europe

The importance of the pharmaceutical industry to the growth of the European Union lies in its substantial R&D investments (estimated at EUR 27,500 million in 2011) as well as the 660,000 jobs it provides. In addition for every job in the sector, three to four additional jobs are created in up-stream or down-stream sectors. In terms of performance, the industry is considered a top performer within the European economy, with exports accounting for up to 66% of output. Challenges arise mainly in the form of regulatory requirements, the costs of R&D and budget cuts affecting inputs crucial to the industry.

**Prof. Joanna Chataway**, of RAND Europe, spoke on the pharmaceutical industry and public-private partnerships (PPPs). The complexity of the pharmaceutical industry and the regulatory framework affecting it have shown how outdated the traditional model of government involvement is, which is supposed to be limited to funding activities. Numerous forms of public-private partnerships have since materialised, the most important of which is the Innovative Medicines Initiative (IMI), a EUR 2 billion PPP involving the European Commission and the European Federation of Pharmaceutical Industries and Associations (EFPIA) and which aims at fostering a collaborative environment for innovation in the industry. However, one relevant aspect has thus far remained untouched by PPPs: public opinion. Given the public's general sensitivity towards the industry, it is important to enhance the image of pharmaceuticals as a positive driver of health, employment and research.

It was argued that negative perceptions by the public, through their impact on policy makers, posed a severe cost both to industry and the public itself, as pharmaceutical advancements and the resulting availability of treatment may be stalled or even halted. As such, there is a clear benefit in improving the public image of PPPs. When asked about the reservations towards PPP, an industry representative stated that these were mainly to be found on the side of policy makers. It was agreed that the main steps to take are the communication of successful forms of PPP to the public and clarification of the roles of public and private players willing to engage in PPPs.

Richard Torbett, Chief Economist of EFPIA, spoke on access to medicine and the position of the industry in growth strategies. As with many sectors, the pharmaceutical industry has witnessed an increased price convergence as a consequence of the formation of the Internal Market. The general use of international reference pricing for medicines is an important element in this respect. Nevertheless, the special position of medicines has prompted economists to question the need or usefulness of price convergence. It was argued that access to medicines might be more effective as a policy target, as a number of elements (including the willingness to pay, health literacy and delivery systems) make a difference in price desirable at times. In a broader sense, it was acknowledged that the pharmaceutical industry has an important role as a lever for growth. The opportunities posed by the presence of industry inputs as well as the rapidly ageing population and the need for better access to treatment, make the inclusion of the pharmaceuticals in the European growth effort not only useful, but necessary. In order to allow the EU to remain one of the

three main locations of the global pharmaceutical industry (the others being the USA and Japan), a triple focus on health, financial sustainability and growth/competitiveness was important. Exploiting synergies and reducing costs to the industry were considered vital in this respect.

Thomas Heynisch, Deputy Head of Unit, DG Enterprise and Industry, European Commission, explained the role of the Commission in promoting pharmaceutical competitiveness. The key elements of the Commission's commitment are the progress towards a single market in pharmaceuticals, dealing with the challenge of globalisation, pursuing a high level of public health protection and fostering an environment favourable to innovation. DG Enterprise has undertaken a set of legislative and non-legislative measures to follow up on these policy goals. The main pillar of legislative action is the Directive on transparency on the pricing and inclusion of medicines which is currently under review. It aims to facilitate free movement without infringing the competence of Member States in pricing and reimbursing medicines. This is done by requiring time limits for pricing or reimbursement decisions, an obligation to provide applicants with a statement of reasons in the case of a decision and an obligation to provide legal remedies for the applicant. Non-legislative actions include the spuring of momentum between stakeholders in the context of the Pharmaceutical Forum (2005-08) by providing recommendations on access, expenditure control and rewards for innovation. In 2010, a stakeholder process on corporate responsibility in the industry was launched and included the issue of access to medicines, exploring non-regulatory ways of addressing the access challenge. In addition, the Commission has indicated its intent to explore new areas of action along the lines of a comprehensive approach to counter distortions of the internal market, provide a review of the regulatory framework and work towards a level-playing field in global markets.

Xavier Hormaechea, Director of Public Affairs at UCB, examined how to incentivise businesses and the role of institutional actors. In 2010, the Belgian pharmaceutical company UCB started the construction of a Centre of Excellence for the pharmaceutical industry at a research and production facility located in Braine-L'Alleud (BE). The project brought EUR 70 million worth of investments to the region, and was facilitated by incentives provided by the Walloon regional authorities, including tax breaks on the R&D activities which make an important part of the new site's activities. In addition to fiscal incentives, the access to highly skilled labour as well as the geographic position and the location of existing plants were mentioned as key elements in the firm's deliberations and its decision to keep its new activities in Belgium. However, an important element of friction between institutional priorities and actions was identified. Whereas the pharmaceutical industry has a role to play in promoting growth, it is often affected by budget cuts relating to crucial inputs such as R&D, production sites and educational inputs such as specialised Ph.D. programmes. The highly layered structure of institutional decision making was also mentioned as an obstacle to the growth of the industry. In this respect, it was suggested that the current crisis should be used as an opportunity to address these key challenges in order to make lasting changes to the benefit of industry, consumers and society as a whole.

# **Automotive Industry Workshop**

# Future of the Automotive Industry in Europe, Competitiveness, Innovation and Impact on Suppliers

The workshop started with a welcome note from **Eric Desomer**, EMEA Automotive Industry Leader of Deloitte, followed by a presentation of **Björn Willemsens**, Automotive Industry Director of Deloitte. His speech was focused on the future of mobility. In his point of view, current problems of the automotive industry are widely caused by lack of innovation. The automotive industry does not change fast enough and is limited by trade barriers (e.g. high import tariffs in China). The industry is slowly recovering from the crisis and soon it will get back to normal levels. However, emerging markets are not growing, but "exploding". Huge increase is expected by 2050. The futuristic vision for the car industry should be "self-driving cars", manageable by a smartphone. The cars are able to notice the traffic jam and "talk" to each other. This vision is based upon existing technology, but it will take years to make it happen. Saved time, which is not spent in traffic jams, should be capable of increasing welfare and GDP.

However, this change in cars would have many implications regarding other businesses – e.g. there would be less need for taxis or insurance (these cars do not crash). Also, car sharing is becoming popular - people less and less need to own a car. It also brings more efficient use of cars – a vehicle is used more hours each day. This influences the product cycle. Advanced societies increasingly prefer hybrid or electronic vehicles, but they are less willing to pay for them. The car of the future is simple, smaller and cheaper – operated by intermediate companies. This means brand new business models.

In response to questions, speakers highlighted the need for more collaboration on testing platforms. Also, the development of intelligent cars goes along with the evolution of engines. Public transport will also be affected. Clever cars will network with public vehicles and optimize travel inside the network. However, this development requires the cooperation of many actors and in this respect the European Commission can play an important coordinating role.

The second presentation of the panel was by **Yves Toussaint**, General Manager of Green Propulsion. He spoke mostly about different types of innovative car engines. In his point of view, alternative fuels are easy to use in principle but difficult in everyday reality. Storage needs high pressures and refilling takes quite a long time. Regarding their availability, some gases are by-products of oil, but some have to be produced from oil. Regarding biofuels, these are ethanol and petrol ICE. They pose a problem with storage, caused by their low energy density. Therefore volumes need to be larger. Also the production capacity is limited. Purchasing from developing countries creates ethical problems.

Electric engines seem to have good performance, but the problem is the battery technology. They have to be refilled quite often and it takes a lot of time. Currently polymers are used and new car models allow speed up to 250 km/h. Beside the good acceleration, electric cars are also safe and reliable. However, regarding electricity, it is hard to track their real emissions. They depend on how the energy is actually made. The battery problem may be solved by hydrogen – but it has to be manufactured and that produces CO2. Hybrids seem to have the

brightest future and high possible market share. They have well balanced performance and smaller engines. "Plug-in hybrid" cars are also popular, very quiet, and with fast acceleration. In addition, they may use cheap off-peak electricity.

In reply to questions, it was agreed that regulation is necessary to deal with the problem of used batteries. This, however, can make cars more expensive. Also, it was noted that buying a hybrid is more expensive but it is much cheaper to run.

**Prof. Paul Nieuwenhuis**, Co-Director, Centre for Automotive Industry Research, Cardiff Business School, dealt with the consequences of new technologies and highlighted the speed of technological progress. He mentioned that "electronic vehicles" are still incentive-driven cars and the car itself costs as much as the battery does. But why do these incentives exist? Emission technology introduces innovation. The EU has a competitive advantage in relation to technologies for complying with environmental regulation. Earlier it was California that had the lead in green regulation, but this has changed – now the EU leads. Other countries are copying EU regulations. The value chain is also influenced by different perceptions of risk at its different stages. He mentioned structural costs of innovation – for example, Audi changed from steel to aluminium structure. The latter was costly and difficult to produce and needed brand new manufacturing processes. BMW recently introduced an electric car where the batteries influence significantly its functionality and structure. Since they are first, they had to set up completely new manufacturing processes.

The workshop was concluded with a presentation by **Michal Kadera**, External Affairs Director of SKODA Auto. He described SKODA's expansion in emerging markets and underlined its importance for overall Czech exports and R&D. About 5% of the Czech working population is actually working in the automotive sector. Central Europe is an important location for the car industry. He mentioned that the "green future" does not include only just cars, but also manufacturing and selling. Production itself can cause more environmental damage than the operation of cars.

It seems that currently also older people are interested in new technologies and e-mobility or car sharing. However it is expensive to build new fast-fuelling electronic vehicles. Regarding car sharing, people often do not treat the shared cars carefully because they do not own them. We have to change people's behaviour (also regarding parking in city centres). He further explained that EU legislation is sometimes cumbersome (e.g. CO2 regulation, quantitative targets) and adds about EUR 2800 to 3600 in extra costs per vehicle. Maybe it would be better to ask companies to invest part of their profits to green innovation, rather than impose quantitative limits. Excessive regulation motivates SKODA to move to the East. It is building production plants in China, Russia and India.

The final discussion was devoted to the liberalisation of world trade and new ways of regulation in the EU. Governments should carefully think about each piece-meal regulation simply because haphazard rules hinder growth.