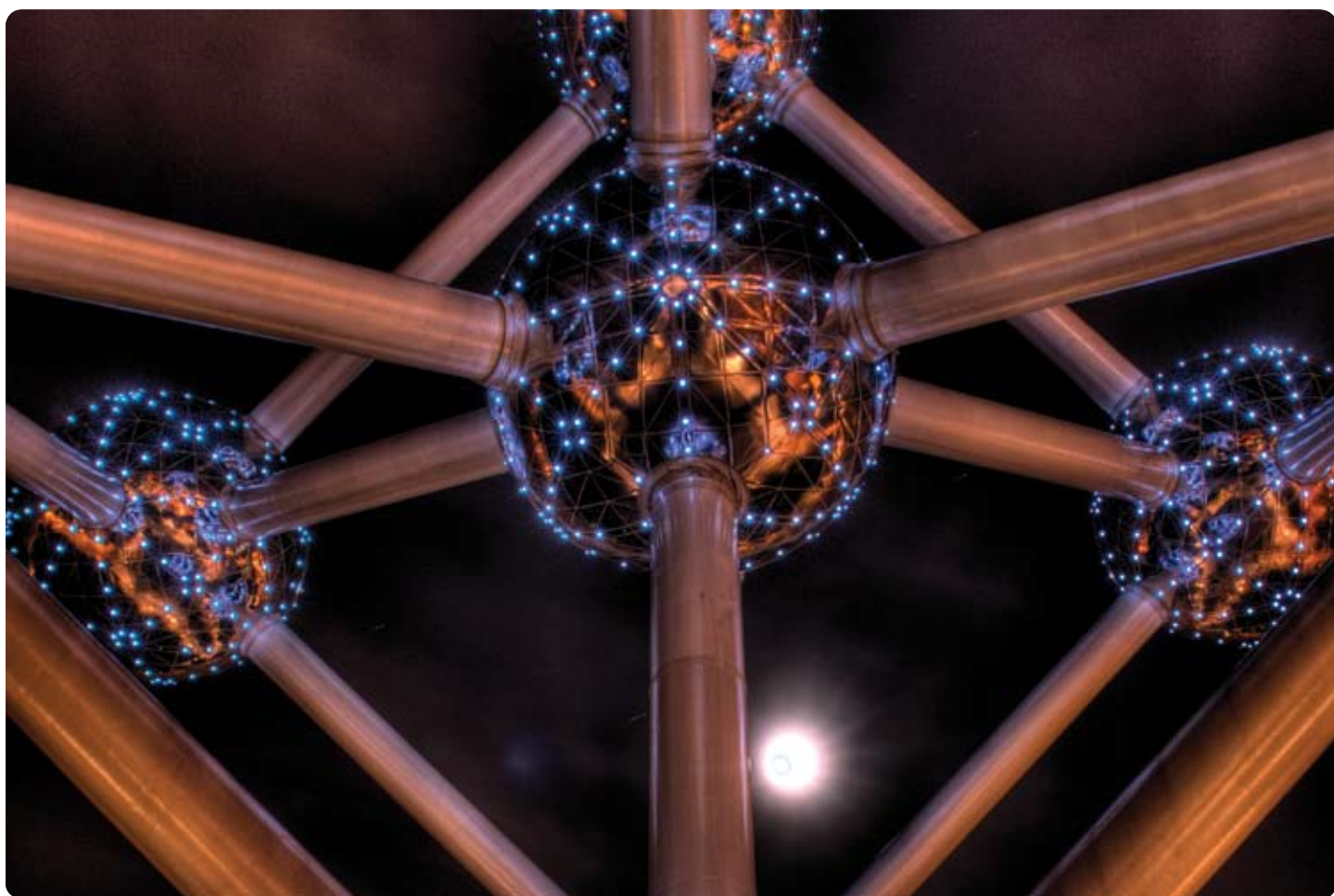


# EPPSA Annual Report 2009



European Power Plant Suppliers Association

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# Uniform EPPSA Statement

■ The European Power Plant Suppliers Association (EPPSA) is the voice, at a European level, of companies both manufacturing components for, and building turnkey power plants. EPPSA's members, located throughout Europe, represent a leading branch of technology with more than 100 000 employees and an annual turnover of over €20 billion.

We actively promote projects aimed at increasing efficient and environmentally friendly improvements in power generation, in particular zero or near zero emission power generation. EPPSA believes increased investment in Research, Development and Demonstration is a key factor in driving EU competitiveness as well as ensuring a power supply for European consumers.

# Investments in new technologies and innovation

will allow European industry  
to improve its efficiency  
and will contribute to tackling  
the climate change targets

MEP Herbert Reul, Chairman of the European Parliament's ITRE Committee





MEP Herbert Reul, Chairman of the European Parliament's ITRE Committee



Together we must however convince the citizens of the advantages of new technologies. The current climate, in which nuclear energy, coal power plants and other sources of energy are rejected, will increase the electricity generation gap even further."

■ It is about time that sustainability, energy security and competitiveness of European industries are recognised as key energy policy issues. A balanced energy mix offers a lot of answers to the challenges we face in the coming decades. In 2050 nine billion people will be living on this planet. By then the global energy demand will have doubled compared to 2007. And then there is the challenge of climate change. The task of the European Parliament is therefore to adapt the European Legal Framework without forgetting the competitiveness of our European Industry.

Only by investing into new energy infrastructures and by increasing the efficiency of existing and future power plants can one guarantee that we will not waste our resources. Investments in new technologies and innovation will allow European industry to improve its efficiency and will contribute to tackling the climate change targets. The next Framework Programme for research should help to address these challenges. But it can of course only help. The main input into research and innovation must be made by the industry itself in close cooperation with public or private research institutions. In order to ensure energy security and competitive energy prices, we must also retain a broad energy mix. We must, therefore, say 'yes' to fossil fuels, which might also include CCS and the development of the next generation CCS using less energy. We must say 'yes' to nuclear power, 'yes' to renewable en-

ergies and last but certainly not least 'yes' to energy saving. It is not a question of doing the one thing or the other, but of successfully combining them all.

Copenhagen did not provide us with a binding agreement that would move us in the right direction. We are now forced to strive for a political consensus and to identify and engage the key players for us to come to concrete agreements in the following months. We need to work together. We must guard ourselves from believing that there is only one solution to any particular problem or only one strategy to follow and that we Europeans have found it. We should therefore also take the time to rethink our positions.

This context poses a challenge to companies, such as EPPSA members. It is not possible to build an energy system on only intermittent renewable energy sources. This would require a lot of backup capacity to meet the demand of European consumers, and challenge the grid integrity. This would be a waste of resources. EPPSA members could and should strive to make power plants even more efficient. European industries will need these improvements to meet the targets of sustainability and competitiveness. And the consumers need them in order to afford energy in the future.

Thanks to the new Lisbon Treaty the European Parliament will be in a better position to live up to these expectations, as will the EPPSA members with hopefully increased support for the development of the necessary technologies in the near future. Together we must however convince the citizens of the advantages of new technologies. The current climate, in which nuclear energy, coal power plants and other sources of energy are rejected, will increase the electricity generation gap even further.

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Consensus  
is crucial in order  
to preserve  
the world climate  
for the generations to come  
and to avert inequity  
in the global economy.

Andreas Wittke, EPPSA President



Andreas Wittke, EPPSA President



Technical development is facing pressure: more than ever, we now need to promote renewable energy and technologies for the reduction of CO<sub>2</sub> emissions. Setting a good example is not enough; we also need to provide others with the right technologies.”

### ■ PREVENTING INEQUITY

The disappointment following the Climate Change Conference in Copenhagen was enormous. People had expected more from the gathering of some 190 nations, and not just the energy and environmental experts. In fact, the entire world had hoped that this conference would push climate protection forward. But, instead of deciding on concrete measures, only targets were agreed upon. And not even that. At the end of the day, the only result was the acknowledgement that global warming should be limited to two degrees Celsius. It remains to be seen as to who will do what, how and when.

Europe is now facing greater challenges than ever before. I do not mean the pressure of meeting our self-set CO<sub>2</sub> reduction targets, nor am I talking about the financial aid that must be provided by our industrialised nations to developing countries in order to make climate protection affordable. I am referring to the pressure technical development is facing: more than ever, we need to promote renewable energy and technologies for the reduction of CO<sub>2</sub> emissions. Setting an example is not good enough; we also need to provide others with the right technologies.

Carbon Capture and Storage (CCS) plays a major, perhaps even the key role here. Firstly, fossil fuels will continue to be a pillar of the power sector for decades to come; their combustion should be made possible without CO<sub>2</sub> emissions as soon as this is feasible. Secondly, it is precisely those countries which are often dependent on their own natural resources that can least afford climate protection. They must have the chance to convert their coal into power, and to do so in a climate-friendly way and at a fair price. Only by doing this, developing countries have a chance to achieve economic security and to break the cycle of poverty.

But it is not only the technicians who are now faced with the challenge of speeding up the wheel of development. Political leaders will also have to take bolder strides to make sure that the climate talks in Bonn and Mexico do not result in the same level of non-commitment witnessed in Copenhagen. Consensus is crucial in order to preserve the world climate for the generations to come and to avert inequity in the global economy. For without global consensus there are only two alternatives: either global warming exceeds two degrees, with the obvious consequences as far-reaching as water shortages affecting

billions of people, or, a handful of countries invest in climate protection (which would not be enough) while others reap the benefits. Climate protection does not come for free. For those who are engaged in sustained production this means paying a higher price for plant and for power, alongside higher taxes. To save climate-conscious manufacturers from being forced to leave the market to others, reliable global standards must be implemented.

Climate-friendly power technology therefore serves a two-fold purpose: protecting our planet and, assuming right prices, availability and acceptance, helping to avoid global market distortions. A lot of ground must still be covered before CCS can make its contribution here.

By **nominating**  
a major Member State's Commissioner to Energy,  
Members States  
**acknowledge**  
the increased importance of this topic,  
as does the Lisbon Treaty.

Patrick Clerens, EPPSA Secretary General





Patrick Clerens,  
EPPSA Secretary General



But this fragile plant needs a lot of care to continue its growth. A new technology needs to be supported during its whole creation process“

### ■ 2009: Year of major changes

The year 2009 was an eventful year with a lot of changes occurring in the European Institutions, our industry sector and our association.

After the 2009 Parliamentary elections, the Brussels scene welcomed a large number of new MEPs, who were confronted with the challenge to get into the dossiers quite fast, due to the tight time schedule. This was and is of course facilitated through the support from the Industry, which can deliver expert knowledge on specific topics, as EPPSA does regarding Power Plant Technology.

Implementing the Lisbon Treaty was another important feat for the Institutions, impacting their competences and workings. By nominating a major Member State's Commissioner to Energy, Members States acknowledge the increased importance of this topic, as does the Lisbon Treaty.

It is the first time that an Article [Article 194 TEU], in an official European Text, gives specific [shared] competences to the European Union on Energy matters. These competences are designed to: “ensure the functioning of the energy market, to ensure security of energy supply in the Union, to promote energy efficiency and energy saving and the development of new and renewable forms of energy and to promote the interconnection of energy networks.” We can therefore expect to get a strong European Union policy on Energy, making EPPSA's work in Brussels even more interesting.

Carbon Capture and Storage (CCS) Technology took in 2009 another important hurdle.

It saw the birth of the first 6 European Demonstration Projects for CCS due to a fund of over €1 billion. Considering the other existing funding possibilities available from the New Entrance Reserve [NER300] and from national governments, one can say that the CCS era has finally taken off.

But this fragile plant needs a lot of care to continue its growth. A new technology needs to be supported during its whole creation process, for as long as it is not commercially available yet; failing this, a serious risk exists that there will be a lack of qualified manpower when entering the commercial phase from 2020 onwards, unless serious support for activities is foreseen after the finalisation of the Demo plants in 2015.

The year 2009 also brought a lot of changes to the Association. The office facilities, suitable for the original 7 Members EPPSA had when moving to Brussels in 2005, were inadequate for the 18 Members we now gather around the conference table. With the move into our new offices, we now have full-fledged conference facilities allowing EPPSA to grow even more.

This growth has also had consequences for the EPPSA structure. In 2005, the Technical Committee sufficed to meet the expectations of all Members. With the increased number of members came an increased diversification of interests, even if the main aim stays the same. To meet these changing demands, specific Working Groups, each dedicated to one specific topic, saw the light.

To conclude, I can say that thanks to the increased input from the EPPSA Member Companies the Association's work and impact grew in 2009 and that the renewed European Institutions will definitely keep the EPPSA Secretariat busy in 2010.

## EPPSA believes ...

**...in a balanced energy mix.** Energy demand is forecasted to rise tremendously over the next decades. Each region on earth has its own specific energy sources. In order to meet this growing demand and ensure the security of supply, there is no one, ideal energy source. All available sources are needed to meet the challenges.

**...in improved efficiency in power generation.** Efficiency improvement in both new and existing plants is a must in order to preserve our scarce natural resources and also to effectively address the CO<sub>2</sub> challenge.

**...that clean, competitive fossil fuel power plants need new technologies.**

Modern fossil fuel technology meets the expectations and requirements of the environment, the industry and the consumers. In order to take advantage of these evolutions in the power sector, the implementation of new fossil fuel technologies must speed up.

... in a  
balanced  
energy mix

... in improved  
efficiency  
in power generation

... that clean, competitive  
fossil fuel power plants  
need new technologies

# EPPSA'S **Key** messages

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... that addressing climate change worldwide requires technological innovations

**...that addressing climate change worldwide requires technological innovations.**

A global approach is essential to meet Kyoto and post-Kyoto goals and to ensure that new technologies are universally accepted for use in all countries relying primarily on fossil fuel.

... in increased Research & Development

**...in increased Research & Development.**

Ambitious targets have been set by the EU to reduce emissions. The only way of reaching these is to develop and deploy improved and environmentally friendly technologies. Fossil fuel plants in turn are essential in ensuring Europe's power supply. Therefore, in order to deliver zero emission fossil fuel power plants on a commercial scale, research and development must attract significant investment. The suppliers have demonstrated their support by investing heavily; now others – particularly Member States – must do the same.

... that urgent investment in 10-12 demonstration plants is required to make Europe a world leader

**...that urgent investment in 10-12 demonstration plants is required to make Europe a world leader.**

Repeated calls have been made for these 10-12 demonstration plants to accelerate development since time is of the essence. This 10-12 figure is a remarkably low number. Funding, a comprehensive legal framework and political support are required to support more demonstration plants and to cover all technological possibilities and all storage options.



EPPSA's President Andreas Wittke the hosts 3rd Annual Technology Evening "CCS: From Pilot to Demo"



Professor Ashley Brown, Executive Director of the Harvard Electricity Group, addresses the directions of the Obama Administration over the American Energy Policy and Climate Change.



Tuomo Hatakka, CEO of Vattenfall Europe, concludes from the world's first oxyfuel-firing Carbon Capture & Storage pilot plant that: Oxyfuel-firing works!

### ■ EPPSA's Annual Technology Evening Brussels, 28 January

"CCS: from Pilot to Demo" was the guiding theme of EPPSA's 3<sup>rd</sup> Annual Technology Evening held at the Crowne Plaza Brussels Europa Hotel, located in the heart of the European district. President Andreas Wittke welcomed some 150 representatives of the energy, environment and industry sectors, the European Institutions and European and international organisations and opened the event focusing on successes in the research and development side of power generation.

Roman Portuzak, Director of Power Engineering Department of the Ministry of Industry & Trade of the Czech Republic, provided a timely and invaluable insight into the Energy priorities of the Czech EU Presidency, with a special focus on Carbon Capture and Storage (CCS). Substantial developments on the CCS regulatory framework were achieved in the past months. Having in mind the urgent need for demonstration and breakthrough research for new low carbon technologies, it was a privilege to welcome Janez Potočnik, European Commissioner for Science and Research. The Commissioner said that he was pinning his hopes on the proven record of science, research and technology tackling every challenge that has occurred in the development of our society and that he believed that Carbon Capture and Storage technology could be part of the solution.

With CCS technology now being implemented in pilot plants, Tuomo Hattaka, CEO of Vattenfall Europe, opened the presentation entitled "**Results from the world's first oxyfuel-firing Carbon Capture & Storage pilot plant.**" With the powerful statement "CCS works!", he provided the results from Schwarze Pumpe, home of the world's first pilot plant based on oxyfuel technology for CCS that had its official unveiling on 9 September 2008.

Acknowledging that climate change is a global issue and that broader dialogue is needed, EPPSA had, for the first time, the pleasure to invite two American speakers.

Professor Ashley Brown, Executive Director of the Harvard Electricity Group, followed by Louis Bono, Counsellor for Energy, Environment, Science and Technology at the United States Mission to the European Union, gave priceless presentations on the directions of the Obama Administration over the American Energy Policy and Climate Change.

All presentations are available on the EPPSA website [www.eppsa.eu](http://www.eppsa.eu).

Following the presentations, participants were entertained over dinner by a caricaturist and enjoyed a champagne raffle. The evening therefore provided an excellent networking opportunity in addition to being highly informative for all those present.



Networking highlight



**Champagne Raffle:**  
3 lucky participants won each a bottle of Dom Pérignon





EPPSA

# Activities



European Commissioner Janez Potočnik presents on the importance of research in developing new low carbon technologies

## ■ EPPSA Workshop on “Power Plant Basics”

As representatives of Power Plant Technology suppliers and in order to promote awareness of the fundamentals of power generation technology among European policymakers and industry stakeholders EPPSA again held a series of sector-specific group workshops in 2009. Participants included other industry association personnel, like EURELECTRIC, and representatives of the European Institutions including Commission staff and representatives of the European Parliament.

These workshops are designed to clearly and simply explain the way in which power plants work, the physical constraints under which they have to operate and to provide background knowledge for efficient decision-making.

Human laws will always have to comply with the laws of Physics!

Questions & Answers at EPPSA's Technology Evening 2009 (from left to right): Tuomo Hatakka (Vattenfall Europe), Janez Potočnik (DG Science and Research, European Commission), Roman Portuzak (Czech EU Presidency)





## ■ Position Papers

Representing the interests of its members to the European Institutions is EPPSA's fundamental responsibility. The development of position papers is one of the instruments used to fulfil this goal. In collaboration with other equipment suppliers, EPPSA developed the following document.

### **Position Paper of the EU Power Plant Suppliers on Knowledge Sharing in the framework of CCS Demonstration**

2009 was a decisive year for Carbon Capture and Storage (CCS) demonstrations when it comes to setting the ground for different funding opportunities.

The knowledge sharing criterion raised serious issues concerning the extent of knowledge to be shared and how to avoid infringement on the suppliers' intellectual property (IP) rights. This is why EPPSA was actively engaged in the European Technology Platform – Zero Emissions Fossil Fuel Power Plants (ETP ZEP) knowledge sharing project, tasked by the European Commission to gather input and recommendations from different stakeholders. While European Equipment Manufacturers acknowledge the critical role of CCS in tackling the global challenges of climate change and energy security, they also insist that intellectual property rights are an important factor to hasten its deployment. Protecting IP rights will also set the basis for

a second generation of CCS Technology that will reduce the efficiency penalties and drive down the costs. Knowledge sharing practices therefore need to be carefully administrated. Ultimately, EPPSA was very pleased with the final version reached by the stakeholders in the ETP ZEP context. The proposal entitled “EU Demonstration Programme for CO<sub>2</sub> Capture and Storage – **Maximising the benefits of knowledge sharing**” showed a clear compromise between NGOs and Industry requests.

## ■ Amplifying EPPSA's Influence

### **International Power Summit Rome, 26 February – 1 March**

Gathering suppliers and utilities from the entire world, the International Power Summit provides an excellent opportunity to develop new market expertise and establish new partnerships.

EPPSA was, for the first time, invited to give its views on the reduction of CO<sub>2</sub> emissions and the consequences of the EU legal framework for the equipment suppliers, namely the Energy and Climate Change Package. The presentation included an overview of the different legal instruments included in the Package, like the revised EU Emissions Trading System (EU ETS) Directive, the Directive on the Geological Storage of Carbon Dioxide, the new rules to promote the use of energy from renewable sources (RES) and

the Decision on Effort Sharing. The Proposal on European Energy Plan for Recovery was also addressed. In EPPSA's view CO<sub>2</sub> reduction is possible by an efficiency increase in power plants, by a possible fuel switch including biomass co-firing and by the implementation of Carbon Capture and Storage technology.

### **Hannover Messe Hannover, 20–24 April**

Building on the 2008 success, EPPSA travelled once more to Hannover for the world's largest annual industrial fair. Over four days EPPSA participated with a stand at the Joint Presentation at Power Plant Technology, one of the leading trade fairs with 105 exhibitors, and welcomed members, other energy industry professionals and numerous interested parties.

Secretary General, Patrick Clerens, was invited to participate in a podium discussion at the Energy Forum Life Needs Power, organised by German trade and industry associations ZVEI and VDE, on the topic of the future of electricity supply. The audience of approximately 40 persons contributed lively to this debate, which was exploring if electricity supply without grids, without nuclear power and without coal would be possible. The final conclusion EPPSA reached was to push for a balanced energy mix without any prejudice regarding specific energy sources.



# EPPSA Activities



EPPSA's presentation at  
Power-Gen Europe 2009, Cologne

## **Power-Gen Europe Cologne, 26–28 May**

The Power-Gen 2009 edition was again a big success. EPPSA's Vice President, Mike Farley delivered an important message on how future fossil-fired power plants will make room for Carbon Capture and Storage (CCS) technology in a presentation entitled "Capture-ready: a Global Example." The presentation addressed more specifically the importance and potential environmental benefit of "Capture-Ready" in the context of the current status of CCS technology and explained the current status of "Capture-Ready" in Europe. A basis for definition of the term was provided alongside the implications for power plant design. EPPSA was also present on the exhibition floor, through a well-received stand, and the Secretary General once more joined the Power-Gen Europe Advisory Board for the 2009 event.

## **New Build Europe Munich, 30 June – 1 July**

Besides being a media partner, EPPSA had the pleasure to deliver a presentation on "A New Legal Framework for Power Plants: The EU Energy & Climate Change Package," which showed the impact of this new European legal instrument on the European equipment manufacturers – with a focus on the process milestones, the different acts included in the package and their effect on the power generation sector.

## **Coal-Gen Europe Katowice, 1–4 September**

The future of clean coal in Europe is of the utmost importance for EPPSA. We participated to Coal-Gen Europe's second edition with a stand and presented our views on the infrastructure requirements for Carbon Capture and Storage (CCS) implementation. "Capture-Ready" has to be recognised as an essential step towards widespread adoption of CCS! The presentation held by Mike Farley gave a good insight regarding coal power plants adaptations in order to be able to be retrofitted with CCS and a roadmap of how to achieve this retrofit and on how to define the requirements for new build plants.

## **VGB Congress Power Plants Lyon, 23–25 September**

In 2009, the VGB Congress "Power Plants" and technical exhibition took place in Lyon. EPPSA travelled to France to support its members by having a stand on the exhibition floor. This excellent networking opportunity was the framework for EPPSA to welcome Clyde Bergemann Power Group during its meeting of the Board of Directors.

## **European Technology Platform – Zero Emissions Fossil Fuel Power Plants (ETP ZEP)**

Having been a driving force since its creation in 2004, EPPSA continued its involvement

with the Zero Emissions Fossil Fuel Power Plants (ZEP) Technology Platform in 2009.

EPPSA and its members attended the ZEP General Assembly, held in Brussels on 20th October 2009, and maintain an active role in the various Working Groups, the Coordination Group and the Advisory Council of the ETP ZEP through our members. Since 2008 four EPPSA member companies have been constituents of the ZEP Advisory Council.

## **Berlin Fossil Fuels Forum**

Like in previous years, EPPSA has been a dynamic member of the Berlin Forum's Working Group on Sustainable Fossil Fuels. The Forum is an important initiative, created by the European Commission's DG TREN, and gathers Commission and Member State representatives with market stakeholders (such as corporations, industry associations and energy experts) to debate a series of issues in specialised working groups. It therefore offers a valuable platform for dialogue on Commission Green Papers and important technological developments. In October 2009, EPPSA was delighted to be invited to address the Forum's Fifth Plenary Session. EPPSA's President, Andreas Wittke gave an important presentation on "The Technological Challenge of CCS."

Vice President  
Mike Farley



President  
Andreas Wittke



Vice President  
Rainer Redinger



Technical Chair  
Klaus-Dieter Tigges



Public Relations Chair  
Gerhard Brandt



Secretary General  
Patrick Clerens



Treasurer  
Pierre Melin

# Organisational Chart

# General Assembly Members



Franz-Josef Mengede  
ABB Group



Philippe Delage  
Alstom Power Switzerland



Massimo Penati  
Ansaldo Caldaie



Georg Gasteiger  
AE&E Group



Carlo Trifone  
BWE



Pierre Melin  
CMI Energy



Franz Bartels  
Clyde Bergemann  
Power Group



Mike Farley  
Doosan Babcock Energy



Mervyn Sambles  
Fluor



Tomas Harju-Jeanty  
Foster Wheeler Energia



Raimund Witte  
GEA Energietechnik



Klaus-Dieter Tigges  
Hitachi Power Europe



Bob McCabe  
Howden Group



Paolo Magaldi  
Magaldi Power



Karel van Buuren  
NEM



Giuliano Cavagnoli  
Nooter/Eriksen



Gianni Casero  
STF BWE



Rainer Redinger  
TLT-Turbo



Andreas Wittke  
Alstom Power Germany



■ Consisting of prestigious engineers from EPPSA member companies, EPPSA's Technical Committee provides the expertise and content for the organisation's position papers and publicity materials. These specialists, skilled in Engineering, Environment and Technology, bring their experience to bear on the latest developments in European energy and environment policy and power generation.

Chaired by Klaus-Dieter Tigges of Hitachi Power Europe, the Technical Committee works closely with the Public Relations Committee.

Carbon Capture and Storage (CCS) technologies confirmed that fossil fuel power plants now have the potential to be both clean and highly reliable. EPPSA's members have played a key role in these technological advances and the Committee delegates are therefore ideally positioned to offer important insights and comments on these areas. The European Union and EPPSA's members have a common goal Europe should take the lead in clean energy by providing innovation and maintaining competitiveness. For this to become a reality, however, continuous long and short-term investments are needed in both existing and future European power plants, including support for adequate research.

Throughout 2009, the Technical Committee has been extremely active due to the large volume of EU legislation proposed. In collaboration with other stakeholders, the

Secretariat and the Committee have shaped **EPPSA's position on the knowledge sharing issue** that arose in the framework of CCS Demonstrations. This was a job done at a very high pace and the Secretariat wants to thank all participants for the time dedicated to this, not leaving them a lot of time for their usual business. In addition, the Committee has continued its work on revising **EPPSA's Capture-Ready recommendations** – in view of the importance being placed on this within Europe. The task force, led by EPPSA Vice President Mike Farley, while bearing the IEA and TÜV Nord guidelines in mind, has successfully completed the revision. The recommendations revealed at Power-Gen Europe 2009 aim to provide a basis for a possible legal definition of "Capture-Ready" and to indicate the implications for the power plant design. Capture-Ready is thus recognised by EPPSA as an essential step towards widespread adoption of CCS. Building plants that are genuinely "Capture-Ready", alongside demonstrating properly regulated and monitored CCS, sets an important example to the world. Since the best technology will not help to reduce CO<sub>2</sub> if it is not applied, EPPSA also recommends to incentivise the widespread deployment of CCS Technology. This was supported by defining maximum emission levels for new power plants based on the age, size and specific type of fuel of the plants. Mandatory Emission Limit Values (ELVs) for CO<sub>2</sub>, based on Best Available Techniques (BAT) in accordance to the IPPC/ IED

definition, are a transparent guideline and would have a huge reduction impact. Older power plants would then have to be retrofitted according to a specific timeline.

EPPSA's Technical Committee also worked on technical input to specific questions the European Institutions put to us. Our experts, for example, gave their input when asked which impact on additional needs of raw materials, special manufacturing components and qualified workforce it would have, if the EU power plant capacity would be expanded significantly. The quality of the Technical Committee's input ensures that it will continue to be an active and informative voice in the sector.

In addition to its policy work, the Committee has maintained its involvement in the European Zero Emission Fossil Fuel Power Plants platform (ZEP) – an initiative that EPPSA helped launching at the end of 2004. Our members participate in the various bodies of the ETP ZEP such as the working groups, the Coordination Group and the Advisory Council. In past year EPPSA has provided valuable input through the Task Forces to the new ZEP documents, e.g. the report on CCS Knowledge sharing, the NER300 allocation draft, the hard facts behind CCS...

The Committee also takes a lead role in developing the content for EPPSA's participation in energy industry events including the association's presentations at the Power-Gen Europe and Coal-Gen Europe events, and EPPSA's Annual Technology Evening.



# The Technical Committee

Kick-off meeting of the Working Group on Concentrated Solar Power, June 2009



Kick-off meeting of the Working Group on Power Plant Efficiency Improvements, October 2009



## ■ Working Groups

In 2009, three more companies became members of EPPSA. While CCS is still EPPSA's focal point, this enlargement was also accompanied by a broadening of interests. In order to cope with different expectations, EPPSA took the very important step of creating four Working Groups coordinated by the Technical Committee. We will certainly face new challenges in 2010 and similar initiatives will help EPPSA to deal with issues in a more specific and accurate way. These Working Groups will each have a lifespan matching their needs, meaning that some Working Groups will stay active for several years, while others may have achieved their aims after several months and will be discontinued.

### **Working Group on Concentrated Solar Power**

Concentrated Solar Power (CSP) will undoubtedly help, not only to meet the EU 20% target for renewable energies but also its broader energy goals. It is a technology which has the advantage of being a renewable energy source, while avoiding the intermittence when combined with traditional electricity sources such as gas. EPPSA members are committed to the development of the three most promising solar thermal technologies: parabolic troughs, solar towers and parabolic dish. The first task of this Working Group was to define the interests of the EPPSA participants, moving on now

to matching these interests with actions towards the European Institutions.

### **Working Group on Power Plant Efficiency Improvements**

EPPSA members clearly acknowledge that without efficiency enhancement there is no chance to reach the EU 2020 targets on CO<sub>2</sub> emissions reduction. Power plants that are both at the end of their lifecycle and running below a certain level of efficiency represent a danger to the efforts made so far in CO<sub>2</sub> avoidance. Furthermore, EU CCS demonstration projects, to be funded by the EEPR and the NER-300 million allowances, will prove that CCS technology works without taking into consideration the efficiency penalty that such a technology brings to a power plant. EPPSA estimates that this penalty will reach 12 to 14 percentage points for the first demos. Efficiency enhancement is therefore absolutely necessary to integrate this technology into existing and new build power plants with the lowest possible efficiency penalties. In order to achieve this, all components of power plants must be scrutinised, since the fruit that was the easiest to pick, has already been picked.

### **Working Group on Flue Gas Cleaning**

Addressed under the Integrated Pollution Prevention and Control / Industrial Emissions Directive (IPPC/IED), flue gas cleaning is a fundamental topic for the power generation industry, as it sets the emission

limit values for polluting substances. With the advent of CCS, some of the requirements for power plant components that were valid up until now will significantly change. This is particularly true for the flue gas cleaning systems. The employment of a certain CO<sub>2</sub> technology will determine what adjustments and upgrades have to be made to meet the requirements defined by both the EU regulations and the emerging technology. EPPSA fears that the EU legal framework may create a gap between policymakers' ambitions and what is technically feasible. The creation of this working group has been, so far, a successful start to handle these potential risks.

### **Working Group on Smart Grids**

EPPSA welcomes the initiative of the European Commission Directorate General Transport & Energy to set up an EU Task Force on Smart Grids. Smart power and the efficient functioning of the electricity grid are of the utmost importance for the decarbonisation of the power sector and more broadly for a secure energy supply across the EU.

Considering the future regulatory landscape surrounding smart grids, EPPSA believes that changes at that level will have consequences on energy management across the whole of the electricity chain, starting at the production. We see therefore a great opportunity to bring our knowledge in this field to the fore and assist in the integration of new and cleaner technologies into the network.



Meeting of the Public Relations Committee at Magaldi Power in Salerno, September 2009  
From left to right:

Pascal Fontaine [CMI Energy]  
Thomas Neff [TLT-Turbo]  
Simone Trifone [STF]  
Patrick Clerens [EPPSA Secretariat]  
Paolo Bonafini [Nooter/Eriksen]  
Markku Kostamo [Foster Wheeler Energia]  
Annette Titzmann [Alstom Power]  
Krisztina Varga [EPPSA Secretariat]  
Josef Edelmann [EPPSA Secretariat]  
Maria João Duarte [EPPSA Secretariat]  
Helge Schulz [Hitachi Power Europe]

Not pictured:

Manfred Napp [AE&E Group]  
Gerhard Brandt [ABB]  
Günter Baur [Magaldi Power]  
Heinz Kallenberg [GEA Energietechnik]  
Massimo Penati [Ansaldo Caldaie]  
Matt Tapsell [Doosan Babcock Energy]  
Sonja Mayer [Clyde Bergemann Power Group]  
Wim van Lenthe [NEM]

■ Considered the “creative brain”, the Public Relations Committee is behind all EPPSA communication strategy, ranging from the numerous publications to events promoted by EPPSA or by third parties. The chairman, Gerhard Brandt from ABB, knows how to get the most out of the participants, who cover a range of backgrounds, including marketing & sales, public relations and engineering, to give shape and structure to EPPSA’s goals and strategies.

Defining how to bring the message across is the most important task for a Brussels-based Association. The Secretariat will of course have to develop contacts and get renown as a player in the European circles, but this will not be sufficient to achieve the set targets if the means to deliver the message are not of the same quality. The content is important, but often the packaging is at least as important. This should be interpreted in the light of the targeted audience. The same topic will have to be prepared in a completely different way for communication to engineers, to the staff of the Commission or to the members of the European Parliament or of the Council.

The most important event for the PR Committee was undoubtedly the unveiling of the new EPPSA visual identity during the EPPSA Technology Evening on 28 January 2009, on which the Committee had been working for several months. This was intimately linked to the [re]definition of the association’s “brand”, another key task of this Committee. It takes quite some time for a European Association to get recognition in the Brussels arena. By 4 years of carefully taking into consideration how the different messages are linked, and by carefully choosing the audience, the PR Committee managed to give EPPSA a certain reputation. One of the Committee’s tasks, therefore, is to maintain this reputation by carefully choosing the right balance between the different interests to consider, namely the associations’ interest in educating the policy-makers on a technical topic, the interests of the reader in getting a complete and holistic approach and of course the obligation to maintain a very transparent and fact based communication, which the reader can trust and build upon. This has been achieved by using a coordinated communications plan





Flyers developed by the PR Committee in 2009

# Public Relations Committee

and by regularly updating the Association's key messages on the political topics treated. This work is of the utmost importance seeing how EPPSA is regularly consulted for its know-how in power generation and it is crucial that the association can react in a competent, timely and professional manner. The Technology Evening is designed to educate policymakers and industry alike, merging informative presentations with a relaxed networking atmosphere. This gathering allows the Association to showcase innovative technologies currently under development by equipment suppliers, meaning what our

member companies have to offer. The 2009 Technology Evening was successful because of the dedication of the PR team that did not only work on the presentation of EPPSA's display material, but also developed the content together with the Technical Committee to guarantee the best impact on the participants. This is why in 2009 the CEO of Vattenfall Europe presented the world's first Pilot Plant for Oxyfuel firing, erected by EPPSA Members. Credit for obtaining some of the 2009 Technology Evening's most prominent speakers should also go to the PR committee.

At last, it is the PR Committee that is ultimately responsible in deciding which events EPPSA should take part in, and in choosing the final design of EPPSA's promotional materials. Events like the Hannover Messe, Power-Gen Europe and Coal-Gen Europe proved to be invaluable means to reach a wider audience and promote the Association's message of clean, secure energy from fossil-fuel power generation.



The EPPSA Secretariat: Kamila Stevikova,  
Patrick Clerens and Maria João Duarte  
Not pictured: Josef Edelmann

■ **Maria João Duarte** is Policy Officer for EPPSA and responsible for all facets of the association's public relations and interaction with the members. She joined EPPSA following experiences with international organisations in the humanitarian and security field and holds a degree in International Relations.



# EPPSA Secretariat



■ **Patrick Clerens** has been EPPSA's Secretary General since the association's move to Brussels in January 2005. Building upon his prior experience as EPPSA's Brussels Representative, he liaises between member companies and the EU institutions on issues related to energy and clean fossil fuel technology. Mr. Clerens studied law at the Universities of Saarbrücken and Mainz.



■ **Josef Edelmann** joined EPPSA as Technical Advisor in June 2006. An expert engineer with more than thirty years experience in the power generation industry, Dr. Edelmann monitors EU legislation concerning energy and funding opportunities, including the 7th Framework Programme. He also works closely with EPPSA's Technical Committee and leads the formulation of the organisation's position papers in response to EU initiatives.



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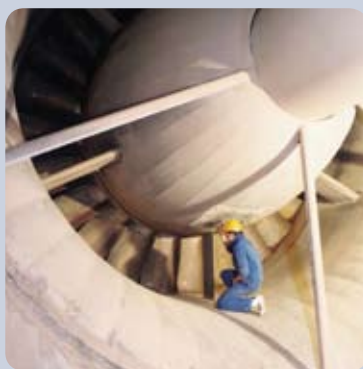
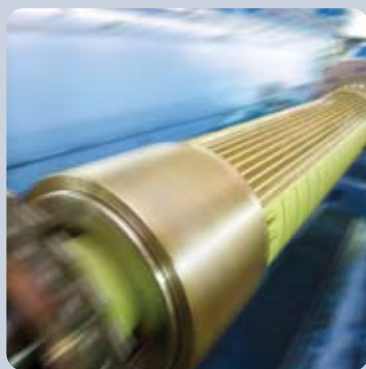
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