

HANNOVER MESSE 2009 mobilizes industry

The world may be in recession, but HANNOVER MESSE 2009 clearly demonstrated the industrial community's determination to see the crisis as an opportunity to explore new approaches. The wealth of innovations on show at all 13 tradeshows only reinforced the optimism shown by exhibitors and trade visitors. "The mood in Hannover was mostly positive – despite the difficulties the mechanical engineering sector is currently facing," said Dr. Hannes Hesse, Director of the German Engineering Federation (VDMA), confirming that the fair had once again served as an accurate barometer of the prevailing sentiment in industry.

Around 210,000 visitors – one in four from outside Germany – came to the Hannover showgrounds over the five days of the fair (20 to 24 April), where 6,150 companies from 61 nations ran exhibits on 224,800 sqm (2.42 million sq.ft.) of display space. A record 4,000-plus new product developments were unveiled at the fair. At the end of the show, 73 percent of exhibitors confirmed they would be back in 2010.

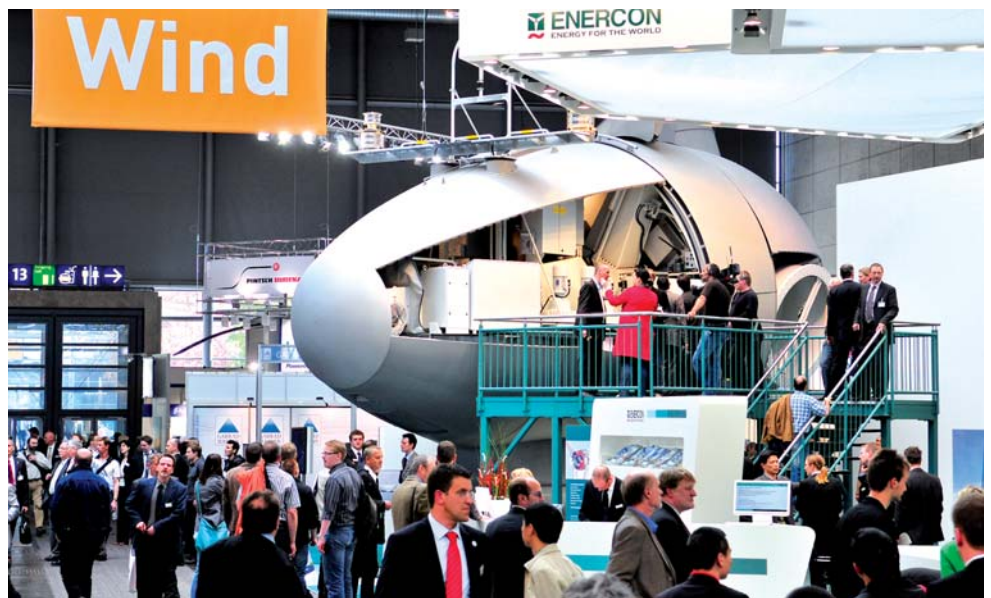
MobiliTec to debut at HANNOVER MESSE 2010

In 2010, HANNOVER MESSE will feature a new specialist trade fair: **MobiliTec** will showcase the latest mobility technologies, including hybrid and electric drives, mobile energy storage solutions and alternative fuels. The new fair will be located in the revamped Energy display area in Hall 27, which will also be home to all renewables exhibits in 2010.

MobiliTec will be complemented by an international forum, located right in the heart of the display area. It will also feature a test track where visitors will be able to take electric vehicles for a test-drive.

Well over 100,000 converge on leading energy shows

"Wind" debut a resounding success



HANNOVER MESSE 2009 was a tribute to entrepreneurship: a spirit of courage, innovation and optimism was palpable throughout the showgrounds. This was particularly true of the 1,100-plus international companies who mounted displays at the three energy-sector trade-shows: **Energy**, **Power Plant Technology** and the newly-established **Wind**. The hustle and bustle at the exhibition stands and in the corridors of Halls 11, 12, 13 and 27 was due to a strong turnout of well over 100,000 visitors from around the globe, who converged on Hannover to gather information about the latest technological solutions for energy efficiency, supply security and the many challenges of climate change.

"HANNOVER MESSE has well and truly become the world's biggest energy-themed trade fair," said Oliver Frese, the Deutsche Messe executive in charge of energy displays, at the close of the fair. With three energy-sector tradeshows plus a strong line-up of allied display categories – such as industrial automation, power transmission, industrial supply, and R&D – HANNOVER MESSE is uniquely positioned to provide a complete overview of the energy market.

With 156 exhibitors and over 58,000 visitors, the new Wind show got off to a stunning start,

positioning itself instantly as a major exhibition platform for the booming wind energy sector. With Wind onboard alongside Energy (conventional and renewable power generation) and Power Plant Technology (planning, construction and operation of power stations), HANNOVER MESSE now has the "energy mix of the future" completely covered. Not surprisingly, Deutsche Messe recorded a significant increase in the number of international energy-sector professionals at this year's fair. (Read on for more information about the energy-themed trade-shows)

Supporting program a major visitor-magnet

This year's program of energy-related events and presentations ideally complemented the energy-sector exhibits. Particular highlights were the WORLD ENERGY DIALOGUE, which was attended by 627 energy experts from around the globe, and the "Life needs Power" forum, which was visited by well over 2,000 industry professionals. (Read on for more information on the supporting events)

For further information, visit:
www.hannovermesse.de/homepage_e

Tailwind for renewables

Global wind energy sector booming



The **Wind** show has landed! The premiere of the leading trade fair for wind generation technology, components and services was a resounding success. Wind 2009 was, in fact, the HANNOVER MESSE industrial fair's best

performing new venture of recent years. The current boom in the wind industry was clearly evident in the upbeat mood among exhibitors and trade visitors in Hall 27. German Wind Energy Association (BWE) CEO Ralf Bischof: "The regulatory and political fundamentals – Germany's recent reform of its renewables legislation, the EU's binding renewables expansion targets and the energy program in the U.S.A. – provide a sound basis for continued growth in the wind energy sector."

According to BWE figures, sales of German-made wind turbines and turbine components grew from 7.6 to 8.5 billion euros in 2008, a year-on-year increase of almost 12 percent. A whole 82 percent of these sales came from exports. The 2009 export figures are likely to be even higher.

The wind industry demonstrated at the fair that it is technologically geared up for the future. For instance, the exhibits of optimized-

yield turbines for on-shore sites in the 2-3 MW range proved a major hit with trade visitors. The leading technology trends on show included variable power converters for intelligent grid integration plus aerodynamically optimized components.

HERMES AWARD goes to Voith Turbo Wind



Dubbed the "Oscar of the engineering sector," the HERMES AWARD is a prestigious technology competition carrying 100,000 euros in prize money. And this year it went to Voith Turbo Wind GmbH (Crailsheim, Germany) for its innovative new WinDrive system, a variable-speed hydrodynamic drive system for wind turbines. The Voith drive is extremely reliable and enormously reduces overall turbine system weight. The award was presented during the HANNOVER MESSE 2009 opening ceremony.

47 percent of electricity requirement from renewables by 2020

Mega-trends on show in Hall 13

According to renewables experts, wind, biomass, hydro, solar and geothermal energy will be key contributors to our energy supply by 2020. In fact, Germany's renewables industry believes the country can realistically aim to be generating as much as 47 percent of its national requirement from renewables by then. This is the conclusion reached by the German Renewable Energy Federation (BEE) and Germany's Renewable Energy Agency in a joint forecast published this year titled "Power Supply 2020".

The path to this ambitious-sounding target was on show in Hall 13. More than 220 companies showcased the latest innovations in photo-

voltaics, solar thermal energy, biomass, biogas, hydropower and geothermal energy. The "Infopoint" display profiled an electric car and a transparent dishwasher as examples of how flexible loads and energy storage devices can be adjusted in line with fluctuations in wind and solar energy. The Berlin-Brandenburg group presentation featured a hydrogen-wind-biogas hybrid power plant, and the Fraunhofer Institute ran an "intelligent energy" showcase on smart electricity meters and new technologies for the grid integration of electric vehicles.

Market study: German industry will have a 13 percent share of the world market by 2020

Between 2005 and 2020, global market sales of renewable-energy power plants will more than quadruple from just on 60 billion euros to around 275 billion. By then, the German renewables sector will account for about 13 percent – or 35.6 billion euros – of global sales. In other words, in 11 years' time, the German renewable energy technology sector's share of the global market will rival that currently enjoyed by the country's mechanical engineering sector. These are the preliminary results of a current study commissioned by the German Renewable Energy Federation (BEE) and Deutsche Messe and presented at HANNOVER MESSE 2009.



Hydrogen + Fuel Cells

This year's Hydrogen + Fuel Cells pavilion drew 148 exhibitors from 22 nations. VIP visitors to the group display included Germany's federal transport minister, Wolfgang Tiefensee, who came to learn about the latest developments in fuel cell-powered heating.

This year there was a strong focus on fuel cells for domestic and industrial use. Other crowd-pullers included the EcoCarrier, a zero-emission commercial vehicle designed primarily for tradesmen and municipal service providers, plus a collection of fuel cell-powered tractors. There was even a 3,000 sqm (32,300 sq. ft.) open-air site where fairgoers could test-drive fuel cell-powered cars and scooters.

By the last day of the fair, 47 of the exhibitors had already signed up for HANNOVER MESSE 2010. "This high up-take rate is unprecedented in the group pavilion's 15-year history," the organizer, Tobias Renz, commented.

→ Further information: www.fair-pr.com

Save smart with energy efficiency

Strong visitor interest in advanced energy technology



This year, as always, the **Energy** tradeshow was home to the world's largest gathering of energy-sector experts. Supported by around 900 exhibitors, the show profiled the "energy mix of the future," comprising a smart blend of renewable and conventional generation technologies, plus all aspects of transmission and distribution. The exhibitors in Halls 11 and 12 included specialist power systems engineering providers who are global market leaders in their fields - companies like ABB (Germany), AREVA (Germany), Pauwels (Belgium), Transfor (Switzerland), TCM (Italy) and BLOCK (Germany). The industry can look

to the future with confidence, thanks, not least, to planned supply infrastructure modernization and upgrade plans in Germany and abroad.

The keynote themes at this year's show included smart grids: technologies for the intelligent integration and management of fluctuating energy flows between central and distributed generation, demand management and energy storage. Here, as in all the other display areas and tradeshows at HANNOVER MESSE, the main focus was on energy efficiency through innovation.

The solutions on display included products for the efficient grid integration of offshore wind farms, such as high voltage direct current transmission (HVDC) links with multi-level converter technology, and integrated offshore transformer substations capable of delivering three-phase current. There was also strong interest in superconducting current limiters which prevent damage to grid systems in the event of short-circuits.

The mood at the Energy show was very buoyant. The positive feedback includes this comment from Tuomo Hatakka, CEO of Vattenfall Europe AG: "Once again, this year's show provided an effective channel for building relationships with political leaders and the community, but also for face-to-face dialogue with ordinary people."



Energy efficiency made easy

The "Energy Efficiency in Industrial Processes" special display in Hall 26 was a gold mine of information as to the where



Korean Prime Minister HAN Seung-soo and German Chancellor Angela Merkel at the Energy Efficiency in Industrial Processes display.

and how of energy savings in industrial production and downstream processing. Manufacturers and users of automation, motive power engineering and machinery solutions demonstrated how the right choice of innovative products, systems and processes can optimize industrial plant efficiency and reduce energy consumption. This was illustrated to impressive effect by a number of showpieces, including a large interactive model bioethanol plant. These presentations were complemented by Best Practice projects from a range of industries, an array of live demonstrations, and detailed commentary by experts from Germany's foremost manufacturing and engineering associations, the ZVEI and VDMA. The display had its own "energy efficiency bus" to ferry visitors to other energy efficiency-themed displays on the exhibition grounds.

Contracting and Cogeneration

The Contracting and Cogeneration group pavilion demonstrated how energy efficiency can be increased and costs reduced via optimized energy management systems and tailored solutions for cogenerating electricity, heat, cooling, and process steam.

The pavilion is a revamp of the highly successful ZVEI ESCO Forum, and was launched this year by the German Electrical and Electronic Manufacturers' Association (ZVEI) and the German Cogeneration Association (B.KWK). There were a good 12 participating companies in all, including both manufacturers and contracting operators of cogeneration plants. Reference projects on tailored energy supply solutions were complemented by a wealth of exciting exhibits, including motors for cogen plants, micro-turbines and industrial heat pumps. All of this provided the trade visitors with a good overall picture of the cogen technologies and services currently available.

Power Plant Technology – Investment fuels growth

Hybrid power plants to the fore



As the world's demand for energy increases, so too does its need for investment in new and replacement power plant infrastructure. All the more reason for this year's Power Plant Technology – the leading trade fair for power plant design, systems operation and maintenance – to be even bigger than the debut event in 2008. Located in Hall 27, the show was home to 105 exhibitors.

The tradeshow's 32,000-plus visitors showed intense interest in the displays on power station retrofit systems. These included state-of-the-art instrumentation and control systems, aerodynamically optimized turbine blade profiles, high-efficiency combustion solutions, and carbon capture and storage (CCS) technologies. Other highlights included hybrid power plants comprising combinations of renewable and

conventional generation technologies. Also on display were advanced high temperature-resistant combustion chamber materials and steam circuit components designed to markedly increase power plant efficiency.

Users Forum well attended

The five-day Power Plant Technology Users Forum was very well attended. Leading industry experts examined the technological, commercial and political underpinnings of conventional energy generation. The discussions also explored ways in which cutting-edge power plant technology can help combat climate change.



Life needs Power



This year's Life needs Power forum was a big success, its four theme days pulling in more than 2,000 attendees and its careers day generating intense interest among young people. The forum, which comprised more than 30 lectures and 11 panel discussions, addressed topical energy technology, energy

supply and energy policy issues. It was embraced by technology manufacturers and users as well as representatives of the R&D and government sectors as an opportunity to discuss the latest R&D findings, emerging ideas and applied solutions. The keynote themes were: renewables, electric mobility, smart grids, and the German government-sponsored E-Energy Initiative. Day five of the forum, which was dedicated to young people and careers, examined energy technology processes and relationships, and featured project presentations by school groups. Life needs Power was organized by the German Electrical and Electronic Manufacturers' Association (ZVEI) and the German Engineering Federation (VDMA).

→ **Further information:**
www.life-needs-power.de
 (German only)

SuperConductingCity 2009:

New location a major plus

"Exceeded all expectations" was the unanimous verdict of the exhibitors at this year's SuperConductingCity, which, for the first time, featured as part of the "Energy" show in Hall 13. The relocation from Hall 2 (Research & Technology) underscores the advanced stage of commercialization of this interdisciplinary technology and benefited the organizers, who recorded greater exhibitor and visitor numbers.

A high-caliber contingent of international corporations, institutes and research bodies used the 330 sqm (3,550 sq.ft.) group pavilion to showcase the enormous potential of superconducting products, processes and industrial applications. For instance, compared with conventional transmission technology, superconducting lines can achieve significantly higher efficiency levels. After all, they can handle 100 times the current of traditional copper lines – at practically zero resistance.

WORLD ENERGY DIALOGUE



Youn-Ho Lee, outlined the Partner Country's nationwide initiative to promote "green growth". The initiative aims to boost Korea's energy efficiency by more than 40 percent by 2030.

On day two of the conference, the focus was on the intelligent networking of power grids, new power station design, the development of energy storage systems as well as a special case study on energy supply security with reference to Africa. "The involvement of African energy-sector experts certainly further enhanced the caliber of this year's event," reflected WORLD ENERGY DIALOGUE Chairman, Prof. Klaus Töpfer.

→ Further information:
www.hannovermesse.de/wed_e

Energy supply in times of globalization, dwindling resources and climate change was the keynote theme at the 4th WORLD ENERGY DIALOGUE. 627 delegates from 21 nations attended the two-day international conference, staged as part of HANNOVER MESSE 2009. On

the first day, a group of renowned international energy experts from industry and politics gave presentations and held discussions on energy policy developments and issues affecting Korea, the USA, Europe and Germany. In addition, Korea's Minister of Knowledge Economy,

CLEAN MOVES

This year, CLEAN MOVES, the leading international platform for energy-efficient mobility technologies and sustainable mobility solutions, put the spotlight on environmentally friendly, energy-saving transport options.

from industry, research and government gave presentations and participated in discussion groups on energy-efficient mobility solutions and shared know-how on market-ready technologies.

At the CLEAN MOVES forum in the heart of the CLEAN MOVES exhibition in Hall 13, experts

→ Further information:
www.cleanmoves.com



Energy Efficiency Award 2009

This year, three companies received the Energy Efficiency Award for successfully completing projects that set new benchmarks in energy efficiency. First prize went to motor and fan manufacturer ebm-papst Mulfingen GmbH & Co. KG, while brewery



Brauerei Bosch and the Chemicals division of Evonik Industries AG claimed second and third prize respectively. Thanks to their efficiency projects – heating of a factory building using waste heat from production processes, development of an innovative wort boiling process, and optimization of a thermal secondary combustion plant – the companies were able to reduce their energy consumption by up to 80 percent, cutting energy costs by as much as 91 percent. Worth a total of 30,000 euros in prize money, the Energy Efficiency Award is offered by the German Energy Agency (dena) in association with Deutsche Messe.

→ Further information:
www.industrie-energieeffizienz.de
 (German only)



German Chancellor Angela Merkel and Korean Prime Minister HAN Seung-soo on a tour of the exhibition grounds.

Innovations summit

Impressions of HANNOVER MESSE 2009

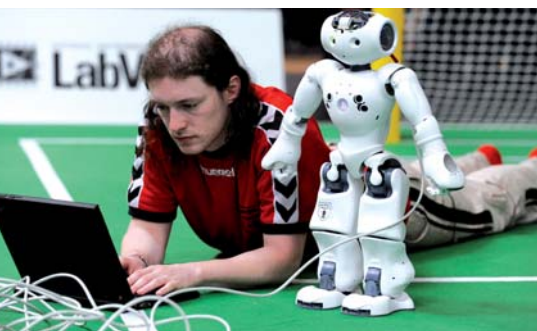


The exhibitors at HANNOVER MESSE 2009 left no doubt that they are ahead of the game. Their innovative strength is a source of optimism and hope that the industrial sector is poised for a return to strong growth once the global financial crisis has ended. Rather than dwelling on the causes and course of the crisis, the fair focused on highly innovative solutions for dealing with it. This positive approach was reflected in the upbeat atmosphere and a tangible spirit of optimism throughout the Hannover showgrounds.

We hope you'll enjoy reminiscing on some of the highlights of this year's innovations summit as you look ahead to another great show in 2010!



German President Horst Köhler officiated at the opening of HANNOVER MESSE 2009





Electric mobility was one of the big themes at this year's fair. The energy-themed content attracted visitors from Germany and abroad.



HANNOVER MESSE launches new initiative: "2010 will be..."

... a year of growth and innovation

The show is over...here comes the show! This motto applies to HANNOVER MESSE's exhibi-



tors and organizers alike. Which is why Deutsche Messe has launched the wide ranging "2010 will be..." initiative – to stimulate new ideas and discussion on topical issues that will benefit the future development of all branches of industry. Dialogue on likely market developments between now and the next HANNOVER FAIR and possible strategies for dealing with these, has already begun. "In 2009, we remained true to the HANNOVER MESSE fair's high quality standard," stressed Dr. Wolfram von Fritsch, Chairman of the Managing Board of Deutsche Messe AG. "Looking ahead, we want to work with our partners in industry to pro-actively help shape the future. Our initiative is all about communicating this."

The "2010 will be..." campaign is an open invitation to businesses, politicians and industry associations to share opportunities and expertise, and engage in dialogue. "In these uncertain times we can only prosper if we work together," agrees Dr. Manfred Wittenstein, Chairman of the German Engineering Federation (VDMA). "The greater the level of participation in the '2010 will be...' initiative, the greater the benefits for all involved."

Made in Italy

Italy is Partner Country to HANNOVER MESSE 2010



Italy will follow in Korea's footsteps in 2010

Following stints by Korea, Japan and India in previous years, in 2010 the focus will return to Europe: Italy is Partner Country to HANNOVER MESSE 2010. When the official announcement was made at the closing of this year's fair, Antonio Purini, Italy's ambassador to Germany, commented: "We hope that this partnership will help to strengthen the long-standing close business, scientific and cultural ties between Germany and Italy even further." He said that, together, the two countries could further bolster the European Single Market.

Italy ranks among the world's great industrialized nations and is a global market leader in many branches of industry, such as the machine tool and industrial automation sectors. It will use HANNOVER MESSE 2010 as a high-profile marketing platform for its many high-tech products. Conversely, Italy itself is a highly attractive market, particularly for energy-sector companies.

Apart from Germany, Italy has traditionally been HANNOVER MESSE's biggest exhibiting nation. A total of 505 Italian companies mounted displays at this year's show. The organizers are expecting a similar participation level in 2010. "We will show that Italy has much more to offer than elegant clothing, wine, food and tourist attractions," explained Massimo Mamberti, Director General of Italy's Foreign Trade Institute, on his recent visit to Hannover. "HANNOVER MESSE has always been a highly successful showcase for Italy. As Partner Country, we will further consolidate our strong position at the fair."

See you in 2010!



Eight flagship tradeshow will profile the latest innovations at HANNOVER MESSE 2010 (19 to 23 April 2010):

Industrial Automation

Leading Trade Fair for Process, Production and Building Automation

Energy

Leading Trade Fair for Renewable and Conventional Power Generation, Transmission and Distribution

Power Plant Technology

Leading Trade Fair for Power Plant Design, Systems, Operation and Maintenance

NEW! MobilTec

International Trade Fair for Hybrid and Electric Powertrain Technologies, Mobile Energy Storage and Alternative Mobility Solutions

Industrial Supply

Leading Trade Fair for Industrial Subcontracting and Lightweight Construction

MicroTechnology

Leading Trade Fair for Microtechnology, Nanotechnology and Laser Micro-Materials Processing

Digital Factory

Leading Trade Fair for Integrated Processes and IT Solutions

Research & Technology

Innovations Market for R&D

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