

16TH INTERNATIONAL PASSIVE HOUSE CONFERENCE 2012

Another milestone on the way to a sustainable future

16th International Passive House Conference 2012 confirms a global trend

The 2012 International Passive House Conference was a great success with 1,000 visitors from more different nations and more international presentations than ever before in its 16 year history. “Yet, it is not about quantity – what really matters are the contents,” said Wolfgang Feist, thanking the speakers from across the globe for their outstanding contributions.

In his opening keynote speech, Professor Dr. h.c. Ernst Ulrich von Weizsäcker emphasised the global need for a 500% increase in resource productivity in order to provide for currently seven billion people on this planet in a sustainable and socially acceptable way. “Passive House even allows for a factor of 10; it is thus a fantastic innovation, offering a cost-effective solution, said Mr. Weizsäcker, highlighting the global significance of the Passive House Standard.

Even today, very little importance is being attached to the subject of energy efficiency, even though 65% of the 2050 climate protection goals will have to be brought about through energy efficiency. Harald Noske, Director of Hanover’s public utility company, called on the government and the federal states to speed up the improvement of general thermal insulation measures for refurbishments. After all, Hanover already serves as an example of an unbureaucratic, successful frontrunner region, to be followed by others. Thanks to the efforts of ProKlima, co-organiser of the 16th Passive House Conference, the share of new Passive House constructions in the City of Hanover area has already reached 30%.

Passive House – a truly global concept



Oak Meadow school in Wolverhampton, Architype, Jonathan Hines (left)

Passive Houses can be built anywhere in the world; anywhere where people live. No matter the location, Passive Houses offer superior comfort with minimal technological requirements and, even more importantly, with extremely low energy use for heating and cooling. These benefits do not only apply theoretically – Passive Houses have been built and have proven to work across the globe as illustrated by dozens of designers from a variety of countries including the United States, Canada, the United Kingdom, Sweden, Spain, Korea and China. A special highlight was the presentation on the Austrian Embassy in Jakarta by the Austrian architect Fritz Oetl which was realised as a Passive House.

The Passive House Standard can be applied to any type of building. Examples featured at this year’s conference include the world’s first tennis hall in Växjö/Sweden and hospitals in Frankfurt and Cologne.

Review of the 16th International Passive House Conference

“Another milestone on the road to a sustainable future”

Darmstadt/Hanover, 22 May 2012, Wolfgang Feist / press concept: Günther Lang

Among the key findings: actual consumption values reflect the enormous energy savings Passive Houses are designed to bring. Passive House design is based on the Passive House Planning Package (PHPP). Suitable for all climate zones worldwide, the PHPP is the leading design tool when it comes to energy efficient buildings.

Among the key findings: actual consumption values reflect the enormous energy savings Passive Houses are designed to bring as illustrated through various examples from the United States, a terraced-housing retrofit in London, schools in Wolverhampton and the first Passive House buildings in Spain.



Wolfgang Feist at the 2012 Passive House Component Exhibition in Hanover

Continuously improved components make designing and building Passive Houses even easier to achieve. The latest developments and innovations were featured at the Passive House Component Exhibition, the largest of its kind thus far, including a variety of new top level “pHA class” windows, another certified compact unit as well as state-of-the-art ventilation systems. Newly developed Passive House components offer global solutions, an example of which is the current revolutionary development of glazing with a U-value of 0.1 W/m²K, which will make the Passive House Standard all the more feasible, even in Ulan Bator, the coldest capital city in the world.

In the highlands of Mexico or in Portugal, with their “lucky climates”, the Passive House standard can even be realised in a simple way without any heating, cooling and dehumidification, using just passive measures.

Growing demand for Certified Passive House quality

Today, there are 40,000 Passive Houses with a total floor area of over 20 million square meters all over the world. 2,500 architects and construction engineers have acquired training to become Certified Passive House Designers. There are already 50 course providers in 20 countries. Even in Greece, Passive House designers perceive their qualification to be the best way of overcoming the financial crisis. The Passive House Standard can be applied to any type of building. Examples featured at this year’s conference include the world’s first tennis hall in Växjö/Sweden and hospitals in Frankfurt and Cologne.

All this has as its basis the Passive House Planning Package (PHPP), which can now be used for all climate zones in the world. Even former critics of the Passive House concept are now designing their energy-efficient houses using this software as a matter of course. After all, this calculation tool has been acknowledged as a reliable method of calculating in advance the heating and cooling energy demand of buildings. At the Conference, the focus was also on further applications of the PHPP for parametric design, energy consultation services, integration into “Building Information Modelling (BIM) systems or for ascertaining the life-cycle costs.

Jean Nouvel remains Jean Nouvel – even with the Passive House Standard

Rem Koolhaas, one of the most renowned architects in the world, writes in his book “The Energy Report” in 2011: “We need strict energy-efficiency criteria for all new buildings, aiming toward near zero energy use, equivalent to Passive House Standard. Retrofitting rates must increase quickly to improve the energy efficiency of existing buildings“. The 74 metre high Police Headquarters Charleroi/Belgium built to the Passive House Standard by

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the studio Jean Nouvel and MDW Architecture demonstrates how contemporary architecture merges with the Passive House.

Passive House Regions lead the way

This year's conference revolved around the adoption of the Passive House Standard worldwide. In Europe, this development is spurred by the EU's Buildings Directive requiring all buildings to be "Nearly-Zero Energy Buildings" by 2020, with Passive House efficiency specified as the minimum energy standard, as well as by the increasing number of Passive House frontrunner regions and communities which have already adopted the Standard in their legislations. The Brussels-Capital Region impressively demonstrated how Passive House floor space was increased from 0 to 250,000 m² within a period of 4 years, with mandatory implementation of the Passive House Standard for all new builds by 2015. Currently, there are 28 such regions, with around 37 million inhabitants; this number will increase to 55 million by the end of this year. The new EU funded project "PassREg: Passive House Regions with Renewable Energies", headed by the Passive House Institute, is playing a decisive role in this development.

The project was presented by Wolfgang Feist in his closing speech, leading up to next year's conference concept and venue: the 17th International Passive House Conference, themed "Energy revolution with Passive House" will be held in Frankfurt, Germany, from 17 – 21 April 2013. Mark your calendars today!

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90 international abstracts were discussed during the 16 sessions. The largest Passive House Exhibition thus far also took place in addition to a Manufacturers' Forum, a Tradespersons' Forum, an international Manufacturers' Exchange, two Passive House Basics Courses, an evening reception in the AWD football arena and 8 excursions,.



The 16th International Passive House Conference was organised by the Passive House Institute and proKlima- Der enercity-Fonds.

Press photographs can be downloaded directly from the website www.passivhaustagung.de under the heading "Press". For any further queries please contact our press contacts Günther Lang or Sabine Stillfried at the PHI.

Press contact:
Sabine Stillfried
+49(0)6151 82699 25
presse@passiv.de

Press officer for the 16th Passive House Conference
Günther Lang
+43 (0)650-900 20 40
g.lang@langconsulting.at