15 PASSIVHAUSTAGUNG 2011

15th International Passive House Conference Press Breakfast on 6th April 2011

Energy efficiency - a real alternative! 15th International Passive House Conference presents solutions



From the left: Dr. Karl Kienzl, Prof. Wolfgang Feist and Günter Lang during the Press Breakfast in Vienna, Photo: PHI / R. Meister

Darmstadt/Innsbruck/Vienna, 06.04.2011- The answer to the question of which energy is most environmentally acceptable is: less energy. Good energy efficient solutions are characterised by the fact that they provide more comfort and safety besides saving energy. They represent an advantage for users as well as investors and benefit the regional and European economy. In the case of buildings, the Passive House represents such a solution. This year the International Passive House Conference will take place in Austria. Highly efficient approaches for sustainable construction will be presented at the world's most important and largest convention for energy efficient construction from 27th to 28th May 2011. Participants from all economic and business sectors are invited to join the committed Passive House regions.

The energy consumption of buildings accounts for 40% of the total energy consumption in Europe. "This sector has been particularly affected by exploding fuel prices. On the other hand, no other sector offers so many economically attractive energy efficiency measures



which help to save 80-95% of costs. Energy efficiency is the most important, cost-effective and safest energy option and at the same time it represents the basic requirement for renewable energy provision on a large scale", states Wolfgang Feist, the Director of the Passive House Institute and Professor at the University of Innsbruck.

The Passive House – today

The Passive House is the most common and well-established energy-efficiency standard that has been scientifically investigated. Experts agree that the Passive House Standard should be elevated to a basic standard from 2012.

A sustainable thermally-relevant refurbishment initiative - the proper way

A modernisation cycle lasts 40 years on average, therefore it is of the utmost significance today that technically feasible approaches are applied for each modernisation procedure that becomes necessary. In the case of refurbishment of old buildings, it is quite possible to achieve a reduction of 80-95% in energy costs with the Passive House Standard, especially with the large number of post-war buildings. "Model refurbishments of old buildings to the Passive House standard will be demonstrated at the 15th International Passive House Conference, including schools, homes, a brewery and listed historic houses", promises Günter Lang, who is the press spokesman for the Passive House Conference in 2011.

15th International Passive House Conference with Passive House Specialists Exhibition

From 27th to 28th May 2011, the world's biggest and most important convention for energyefficient construction will take place in Innsbruck for the first time in the 15-year history of the Conference. Visitors' questions regarding the Passive House will also be answered by experts at the accompanying Specialists Exhibition. The Passive House Standard is being received successfully all over the world. The organisers expect far more than 1,200 participants this year. This year's Conference will be a gathering of Passive House pioneers and is a must for all future-oriented building constructors and decision-makers.

Date: Friday 27th May and Saturday 28th May 2011 Venue: Congress Innsbruck <u>www.passivhaustagung.de</u>

Organisers of the 15th International Passive House Conference are the Passive House Institute, the Province of Tyrol and the University of Innsbruck.

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The press release about this Press Breakfast can be downloaded from <u>www.passivhaustagung.de</u>. For other press releases, logos, pictures and graphics please contact the relevant person in your region, as listed above.



Background:

In view of the current developments, a change in the energy policy is now more important than ever before.

On 8th March 201, the EU Commission presented its roadmap for transforming the European Union into a competitive low carbon economy by 2050 and reducing emissions by 80-95%. With its 40% of the total final energy consumption, the building sector is of major importance here. By applying the Passive House Standard for the modernisation of existing buildings as well as for new constructions, 80-95% of the energy consumption and CO_2 emissions can be saved here in particular.

Hardly a day goes by without more bad news relating to the energy industry. Fuel oil prices have increased enormously in the last few years. Oil spills, disrupted gas supplies and military conflicts in oil-producing countries as well as climate change are burdens imposed by fossil fuels. The possible role of nuclear energy is overestimated to a great extent: 210 nuclear power stations with a total of 442 reactors cover barely 13% of the global electricity demand; it does not provide for heating energy or fuel.

The EU is ambitiously aiming for reductions in energy and emissions by 2050

Consequentially, on 8th March 2011, the EU Commission presented its roadmap for transforming the European Union into a competitive low carbon economy by 2050 *). This stipulates a reduction of 80-95% in greenhouse gases. The roadmap plans for a reduction of 53% by 2030, and 91% by 2050. These objectives are based on the EU directive of 19.05.2010 **) regarding the overall efficiency of buildings, according to which all new constructions in Europe must conform with the standard for "nearly zero energy buildings" by 2020, regardless of whether they are residential buildings or non-residential buildings. All public buildings must comply with this requirement by the year 2019.

A "nearly zero energy building" refers to a building that is implemented according to the specific regional climatic conditions, making full use of the acceptable technical, economical and social energy-efficiency potentials that are available. The enforced use of renewable energy sources cannot be offset against the implementation of the maximum energy-efficiency potential. It is only possible to meet the remaining small energy demand through the use of renewable energy sources to the greatest possible extent when an optimum level of efficiency has been achieved.

The Passive House Standard: the ideal Standard

- Socially acceptable and providing the best value for money:

Housing must become affordable again. Often only the costs for construction are taken into consideration. However, it is the overall cost burden for tenants that matters. That is why the overall costs for rent, heating and running costs are taken as a basis for affordable housing. The EU directive for buildings also plans for a compulsory consideration of lifecycle costs from 2013 onwards. The Passive House Standard is already the most cost-effective possibility for realising "nearly zero energy buildings" today. With extra investment costs of just 2–5%, there are annual energy savings of 70–80% in contrast with the current standards for low-energy houses. The Passive House Standard has been implemented in a large



number of social housing projects, the extent of which is 100% in Vorarlberg, 60% in Tirol and at least 27% in Vienna.

- Well-established and certified:

The Passive House Standard has long since been technically perfected and applied thousand fold all over Europe. The oldest Passive House (multi-family house in Kranichstein in Darmstadt, Germany) can now be considered as an "old building" (that has existed for at least 20 years). Due to the low-tech concept of the Passive House with reduced building services, there are fewer susceptible moveable components. Due to this, maintenance costs of Passive Houses are also less.

- Great advantages for comfort and health:

Besides the energy-relevant improvements, the Passive House Standard also offers a number of advantages for comfort and health. The Passive house provides allergy sufferers great relief as it prevents the proliferation of mites and mould. Apart from this, the concentration of harmful substances like CO₂, radon gas and VOC (volatile organic compounds) in indoor air is 2 to 10 times less than that in conventional buildings.

"Committed Passive House Regions"

The public sector should set a good example, as stipulated in the EU directive for buildings. The "Committed Passive House Regions" that have already voluntarily committed themselves to the application of the Passive House Standard as a minimum standard for all public buildings demonstrate to the world its successful implementation in their region. Only a few larger "Committed Passive House Regions" are mentioned here: Darmstadt-Dieburg, Frankfurt, Hamburg, Hannover, Cologne, Leipzig, Saarland, Lower Austria, Wels, Brussels or Oslo. ***)

"We will wait and see which other cities and countries respond to our call for action until the International Conference at the end of May", animate Wolfgang Feist further regions to follow this example. At the Conference all these regions will be presented to the public. The organisers have invited the energy spokespersons of all political parties to the inauguration of the Conference and also to an informal exchange of views regarding the supply of sustainable energy in buildings.

Construction using the Passive House Standard has increased greatly again, while the construction industry in general decreased in 2010 by 4.3%. There are now 30,000 Passive Houses all over Europe. A recent survey of construction experts shows that the Passive House ranks first among twenty energy-efficient building standards today. The Passive House is also seen to have the best future prospects. That's not surprising considering that the European Commission has declared "nearly zero energy buildings"to be the minimum building standard from 2020 onwards.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/272&format=HTML&aged=0&language=DE

**) Excerpt from Committed Passive House Regions http://www.ig-

passivhaus.de/index.php?page_id=176&level1_id=78



^{*)} Roadmap for transforming the European Union into a competitive low carbon economy by 2050