

Press Release 15 March 2017

# **Aiming high**

## 21st Passive House Conference in Vienna

Darmstadt, Germany/Innsbruck, Austria. When it was inaugurated four years ago, the Raiffeisen Tower in Vienna was the first high-rise building in the world built to the Passive House Standard. Four years later, great progress has been made. This summer, in New York, around 350 students will move into a 26-storey dormitory, being built to the Passive House Standard. The structure of the 88 metre tall Passive House building "Bolueta" in Bilbao, Spain, will be completed within a few weeks. The architects of both these buildings will attend the 21st International Passive House Conference in April in Vienna to report on their exciting projects.

"Passive House for all" is the key theme of the International Passive House Conference taking place on 28 and 29 April 2017 in Vienna. Much has happened since the world's first Passive House was built in Darmstadt, Germany in the early nineties. Because Passive House buildings are suitable for all climate zones, architects and building owners all over the world are now deciding in favour of this extremely energy efficient building standard.



Passive House high-rise in focus at the Conference in Vienna: Students will move into the Cornell Tech building in New York in summer 2017. © Lester Ali

## Sustainable and cost-effective solution

"Passive House is a sustainable and cost-effective solution for the 'Nearly Zero Energy Building' and other national and regional requirements. Because it works everywhere, it offers the chance to achieve climate protection objectives with a high level of living comfort and significantly low costs at the same time", explains Professor Dr. Wolfgang Feist, Director of the Passive House Institute.



The same building from another perspective: The 350 residents of Cornell Tech in New York can enjoy the view of the Manhattan skyline from the building with 26 floors and a height of 86 metres

© Mustafa Onder

# High-rise buildings for the first time

The visitors of the International Passive House Conference, which will be held in the Messe Wien Congress Center this year, are accordingly international. The Passive House Institute with its two head offices in Darmstadt and Innsbruck is organising this annual conference and the accompanying tradeshow. For the first time, one out of the 16 total sessions will explicitly deal with the topic of high-rise Passive House buildings.

# New York offers energy efficiency for students

The Passive House consultant Lois Arena and architect Deborah Moelis from New York as well as architect Germán Velázquez from Spain will give talks on their respective construction projects during the session on high-rise buildings on the Saturday. Students will be moving into the 26-storey Cornell Tech building in New York in the summer of this year. They can look forward to energy efficient and affordable accommodation, with a view of the Manhattan skyline as an extra bonus.

## Passive House apartments in Bilbao

The "Bolueta" high-rise building in Bilbao has also been designed as a residential building. 108 apartments in the tower will be sold, while 63 apartments in the directly connected tenstorey adjacent building will be rented out in the context of social housing. The Vienna University of Technology will also report on its high-rise building on the Getreidemarkt campus which it has modernised to the Passive House Standard. "In densely populated regions, high-rise buildings are an important solution for providing housing space. As proved by the examples here, the Passive House Standard represents a very attractive option", says Professor Dr. Wolfgang Feist.

# **Big Passive House party**

Other sessions during the Conference will deal with current topics relating to energy efficient construction, including Passive House and renewable energy, retrofits to the Passive House Standard, and Passive House buildings in different climate zones. Speakers from China, Mexico and Northern Europe will speak about their projects. During the two days, a total of one hundred speakers from over 50 countries will give presentations. A big Passive House party will be held on Friday evening in the Museum of Natural History in Vienna.

# **World's first Passive House hospital**

The central focus of the pioneering construction project in 1991 in Darmstadt was on the successful implementation of this innovative and energy efficient building standard. Twenty-six years later it has become clear that the design of buildings has also moved into focus. Today, there are many varieties of Passive House buildings with attractive designs and for completely different uses. In addition to residential buildings for families, students or senior citizens, there are also kindergartens, schools, and office buildings built as Passive House buildings, as well as sports halls and swimming pools. The world's first Passive



Yet another Passive House high-rise which the conference will focus on: "Bolueta" in Bilbao, Spain. © G. Velázquez/VArquitectos

House hospital is currently being built in Frankfurt am Main, Germany.

# **Trade exhibition for Passive House components**

At the two-day specialist exhibition accompanying the International Passive House Conference, leading suppliers of Passive House components will display components for new constructions and retrofits, including windows and doors, insulation, and ventilation systems with heat recovery.

# Free forum for building owners

The trade exhibition is also meant for private building owners. They will be able to obtain information about energy efficient construction at the building owners' forum on the Saturday, free-of-charge. Passive House experts and private building owners will provide information.

## PHPP also for retrofits

Prior to the conference, from Monday until Friday a total of nine workshops will be taking place. Topics include energy efficient hot water systems, cooling and dehumidification, initial operation and operation optimisation. Additionally, courses will be offered for the planning tools designPH and PHPP, as well as PHPP for retrofits.

#### Trailblazers: Vienna and Lower Austria

With Vienna, the Passive House Institute has chosen a city which is regarded as a pioneer of the Passive House construction method. For years the Austrian capital has placed an emphasis on this energy efficient building standard, both for new constructions and for retrofits. In the neighbouring state of Lower Austria, public buildings have been built to the Passive House Standard since 2008. The Judiciary Centre here also includes a jail built to the Passive House Standard.







Designs in Passive House construction standard: District building authority (I) and prison (r) in Korneuburg, Austria, © Passivhaus Austria; (m.) residential building in Pamplona, Spain, © G. Velázquez / VArquitectos.

# See for yourself in one of seven excursions

Many of these impressive construction projects can be viewed by visitors of the International Passive House Conference. A total of seven excursions by bus and underground will take place following the Conference on Sunday, 30 April 2017. The Conference will be held in German and English. Simultaneous translation into English will be available for all Germanlanguage lectures. IG Passivhaus and iPHA members will receive a 10 percent discount on the Conference fee. Further information can be found at www.passivehouse-conference.org

The 21<sup>st</sup> International Passive House Conference is supported by the following:

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#### **General information**

#### **Passive House**

A Passive House is a building that does not require any conventional building heating on account of its excellent thermal insulation. Such buildings are called "passive houses" because a major part of their heating demand is met through "passive" sources such as solar radiation or the waste heat from occupants and technical appliances. A Passive House thus consumes about 90 percent less heating energy than existing buildings and 75 percent less energy than an average new construction.

#### Passive House & COP22 in Marrakesh 2016

The United Nations Environment Program (UNEP) explicitly mentions Passive Houses as a key possibility to increase the energy efficiency of buildings and thus reduce global warming, => see "The Emissions Gap Report 2016", pages 32 + 35.

https://uneplive.unep.org/media/docs/theme/13/Emissions\_Gap\_Report\_2016.pdf

#### **Pioneer Project**

The first Passive House in the world was built in Darmstadt-Kranichstein (Germany) 25 years ago by four private homeowners on their own personal initiative. Ever since the homeowners moved in with their families in 1991, these terraced houses have been regarded as a pioneer project for the Passive House Standard. 25 years later, building physicists have attested to the unimpaired functioning of the first Passive House and its unchanged low heating energy consumption. With its newly installed photovoltaic system, the world's first Passive House now utilises renewable energy and received the Passive House Plus certificate for this reason.

### Passive House and renewable energy

The Passive House Standard can be combined well with on-site renewable energy generation. Since April 2015, the new building classes "Passive House Plus" and "Passive House Premium" have been available for this supply concept. The first buildings to be certified in these two categories include both private houses and office buildings.

#### **Passive Houses worldwide**

Passive Houses buildings for all types of uses now exist everywhere. In addition to residential and office buildings there are also kindergartens and schools, sports halls, swimming pools and factories built as Passive House buildings. The first Passive House hospital in the world is currently being built in Frankfurt am Main. Interest in Passive House is growing. In view of the consumption of resources in industrialised countries and the need to contain global warming, municipalities, businesses and private people are increasingly implementing new constructions or retrofits to the Passive House Standard.

#### **Passive House Institute**

The Passive House Institute with its headquarters in Darmstadt (Germany) is an independent research institute for highly efficient use of energy in buildings. Under the leadership of Prof. Dr. Wolfgang Feist, the Institute holds a leading position internationally with regard to research and development in the field of energy efficient construction. The Passive House Institute is the organiser of the International Passive House Conference and the accompanying specialists' exhibition.

Pictures for editorial purposes: <a href="www.flickr.com/photos/passive-house-institute">www.flickr.com/photos/passive-house-institute</a>
To get the latest news relating to Passive House, visit: <a href="www.twitter.com/IGPassivhaus">www.twitter.com/IGPassivhaus</a>

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