



Dr. Wolfgang Feist (Center, White Helmet) recently visited the Chinese Bahnstadt in Gaobeidian. The residential area will include 30 high-rise and multi-family Passive House buildings. The 23rd International Passive House Conference in 2019 will also be held in Gaobeidian. The call for papers has begun. Abstracts for the first Passive House Conference outside of Europe can be submitted until the beginning of this December. Picture: Longfor

China commits to climate protection

23rd International Passive House Conference in Gaobeidian – Call for papers

Darmstadt, Germany. The largest Passive House residential district in the world is currently under construction in the Chinese city of Gaobeidian. Joined by other success stories such as “Bolqueta” in the Spanish city of Bilbao, home of the world’s tallest Passive House high-rise building, and the first certified Passive House hospital being built in Frankfurt am Main, Germany. More and more new builds and retrofits to the Passive House Standard are being completed worldwide, ranging from museums to hotels, schools to office buildings and, of course, residential buildings. The 23rd International Passive House Conference will reflect this global upswing in energy efficient construction. The organisers of the 2019 Conference invite all Passive House enthusiasts to join them in China. The call for papers is now open until December.

Global climate protection

The central topic of the Conference in China will be "Passive House worldwide – healthy, comfortable and sustainable buildings". The 23rd International Passive House Conference will take place next year on the **21st and 22nd September 2019**. As the organiser, the Passive House Institute has deliberately chosen to hold the event in China, a country making great strides in the building sector in order to achieve global climate protection objectives. The Passive House Institute is providing support for new construction projects in China, one of which is the so-called Bahnstadt in Gaobeidian. "We can significantly improve the standard of buildings in China using the Passive House Standard because a lot of new construction activity is currently taking place here. This only makes sense if these new buildings consume less energy", explains Dr. Berthold Kaufmann, who is responsible for large-scale projects in China at the Passive House Institute.



Dr. Wolfgang Feist at a Passive House construction site in China (picture on the left © Longfor). Bolueta - the tallest certified high-rise building built to the Passive House Standard with a height of 88 metres stands in Bilbao, Spain (picture in centre © Varquitectos). The first certified Passive House hospital building in the world is currently under construction in Frankfurt (picture on the right © Passive House Institute).

Bahnstadt Gaobeidian

The city of Gaobeidian lies about 100 kilometres south of the Chinese capital Beijing. It has set a milestone achievement for Passive House: currently the largest Passive House residential area in the world is being built in Gaobeidian. Called the Bahnstadt Gaobeidian after the German Passive House residential area Bahnstadt in Heidelberg, it will include a total of 30 high-rise buildings and multi-family houses and several single-family houses constructed to the Passive House Standard. In total, the foreseen living area in the Chinese Bahnstadt will amount to over a million square metres. In addition, Gaobeidian already has a guest house and a museum built to the Passive House Standard. Other large Passive House projects in China are being implemented in the cities of Beijing, Tianjin and the port city of Qingdao among others.

Modelled on Heidelberg

The Bahnstadt in Gaobeidian is modelled on the original Bahnstadt in Heidelberg (Germany), a Passive House residential area that has been continuously developed on the premises of a former rail freight terminal since 2012. The infrastructure includes kindergartens, a school, fire station, a shopping centre, a DIY store and a cinema, all realised to the highly energy efficient Passive House Standard. A Passive House Conference will also be held in Heidelberg next year in cooperation with the city administration. Everyone is invited to the "**Besser Bauen**" (**Achieve Better Buildings**) conference on the **3rd and 4th of May 2019** in Heidelberg.

Submission of abstracts

Abstracts for presentations at the 23rd International Passive House Conference in Gaobeidian in China may be submitted until 2nd of December 2018. After this date, the scientific advisory board will decide the topics. Further information about the 23rd International

Passive House Conference in China can be found at <https://passivhaustagung.de/en/>

General Information

Passive House buildings

Passive House buildings are characterised by a high quality of insulation, windows with triple glazing and an airtight building envelope. In winter, preheated air is introduced into the building by a heat recovery ventilation system. The five basic Passive House principles allow these highly efficient buildings to dispense with *classic* building heating. 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 heat emitted by occupants and technical appliances. A Passive House thus consumes about 90 % less heating energy than existing buildings and 75 % less energy than an average new construction.

Passive House & NZEB

The Passive House Standard already meets the EU requirements for Nearly Zero Energy Buildings. According to the European Buildings Directive EPBD, all member states must specify requirements for so-called nZEBs in their national building regulations. These will come into effect from 31.12.2018 for public buildings and 31.12.2020 for all other buildings.

Pioneer project

The first Passive House in the world was built in Darmstadt-Kranichstein (Germany) 27 years ago by four private homeowners. Dr. Wolfgang Feist was one of them. 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. 27 years later, after extensive technical testing, building physicists 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.



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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 in these two categories have already been certified, including private houses as well as office buildings.

Passive Houses worldwide

Passive House 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. The Institute founded by Dr. Wolfgang Feist holds a leading position inter-nationally with regard to research and development in the field of energy efficient construction. Among other awards, Dr. Wolfgang Feist received the DBU Environmental Prize in 2001 for developing the Passive House concept.



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Passive House Conference

The Passive House Institute is the organiser of the International Passive House Conference and the accompanying specialists' exhibition. The 23rd International Passive House Conference will take place on 21 and 22 September 2019 in Gaobeidian, China. www.passivehouse-conference.org
In addition, the "Besser Bauen" (Achieve Better Buildings) Passive House Conference will be held on 3 and 4 May 2019 in Heidelberg. www.heidelberg.Passive House Conference.de

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