

China aims for high energy efficiency

Programme for Passive House Conference in China now online - start of registration

Darmstadt, Germany. China is building on a vast scale. This fact becomes apparent in Gaobeidian, a city about a hundred kilometres south of the capital, Beijing. Here, the Passive House district Bahnstadt with over 20 high-rise buildings and many multi-family houses is currently under construction. This is where the Passive House Institute, together with its partners, is inviting everyone to attend the 23rd International Passive House Conference. The theme: "Passive House worldwide". The Conference Programme is online, registration is now possible. The early booking discount is available until the end of July. The Passive House Institute offers a service webinar for questions regarding the conference.

The 23rd International Passive House Conference, taking place from **9 - 11 October 2019** in Gaobeidian, is the first Passive House Conference held outside of Europe. The Passive House Institute in Darmstadt takes the view that China, in particular, has recently recognised the necessity for more investments in sustainability to comply with the Paris Climate Agreement: "China is the country with the most construction work going on at the moment, and this is not being done sustainably at present. This means that we must do our utmost to ensure that the development towards sustainable construction also advances in China. That is why we are actively engaged here," explains Dr Wolfgang Feist.



20 high-rise buildings and several multi-family houses are being built to the Passive House Standard in the Bahnstadt Gaobeidian.
© Passive House Institute

Early booking until end of July

Together with a scientific advisory board, the Passive House Institute has selected the lectures for the 23rd International Passive House Conference. The Chinese partner Window City has undertaken the organisation of the conference in the exhibition hall in Gaobeidian. The programme with the focal theme "Passive House worldwide" takes account of energy efficient construction and retrofitting throughout the world. The German environmental scientist Ernst Ulrich von Weizsäcker will hold the keynote speech. The early booking discount will apply until 31 July 2019.



The construction site from a different perspective. After completion, the Bahnstadt Gaobeidian will be the largest Passive House settlement in the world. The apartments can be viewed during the Passive House Conference. © PHI

"Passive House worldwide"

A series of more than 20 lectures will take place on 9 and 10 October 2019 (Wednesday and Thursday). Two of these presentations will deal with interesting residential as well as non-residential Passive House projects in China. Two series of presentations will discuss energy efficient retrofits, including projects in Sri Lanka, Australia, the USA, Austria, Italy, Norway and Romania. Another working group will examine Passive House projects in hot climates requiring active cooling.



Passive House Institute staff members visit the Passive House construction site in the town of Taiyuan. The Conference in October will have the motto "Passive House worldwide" and will showcase projects from around the globe. © Passive House Institute

Kitchen ventilation

Furthermore, a working group will deal specifically with ventilation systems in kitchens. Other groups will focus on airtightness and quality assurance in high-rise buildings as well as with construction systems, ventilation concepts in general and monitoring. The design tools PHPP and designPH will also be a topic. All presentations will be held in English and Chinese and simultaneously be translated into these languages.

Numerous workshops

The Passive House Institute, together with its partners, will offer workshops on the PHPP and designPH tools. Other workshops will focus on airtightness, energy balance at the district level, energy efficient hot water systems, cooling and dehumidification, calculation of thermal bridges, ventilation systems and windows. The two-day "Train-The-Trainer" workshop will provide valuable information to course organisers for certified Passive House designers and tradespersons. A total of 13 workshops will take place in the run-up to the Passive House Conference and afterwards. The workshops will mostly be presented in the English language.



The exhibition hall in Gaobeidian, in which the 23rd International Passive House Conference will take place from 9 - 11 October 2019. The organisers will also host an evening event on the premises. © Windoor City

Evening event with over 100 exhibitors

The accompanying Specialists' Exhibition is an integral part of each International Passive House Conference; this is also the case in Gaobeidian. Over 100 international manufacturers will exhibit their components for energy efficient construction and retrofitting. The big evening event at the end of the first day of the conference is not to be missed either! Participation in this event is included in the conference fee.

Excursions included

Participation in one of three excursions on **Friday, 11 October 2019** is also included. The participants can choose between a visit to the Bahnstadt Gaobeidian with the Passive House Museum, Passive House projects in the Capital Beijing, or a Passive House office complex in Zhuzhou, which is about 30 kilometres from Gaobeidian. The Bahnstadt Gaobeidian is being built based on the model of the Bahnstadt Heidelberg (Germany). After completion, it will be the largest Passive House residential area in the world. The first construction phase with about 330 000 square metres of living space will have been completed by the time of the Passive House Conference.

"Significant opportunity"

"We are going to China with great expectations. As usual, the conference programme will include many substantiated presentations by international speakers and intensive workshops on specific and relevant tasks. Added to this, will be the comprehensive experiences gained with the construction of Passive House buildings in China, which is taking place there under completely different conditions to those in Europe. This is a significant opportunity to intensify our efforts for global improvement of building standards and thus contribute significantly towards climate protection", explains Dr Wolfgang Feist.

China by train

The conference venue itself is about 130 kilometres from the airport of the capital Beijing and can be reached using the shuttle service provided by the local organiser, by train from the Beijing West Station, or by taxi directly from the airport. Those with more time can travel to Beijing with the Trans-Siberian Railway. Twelve participants from Europe will have the opportunity to travel from Berlin to Beijing in 18 days, with many stops along the way.

Service webinar

The Passive House Institute is offering a **service webinar** on the 23rd International Passive House Conference in China, which will provide information regarding visa requirements, the journey, accommodation and procedure of the conference etc. The hour long webinar will take place on **Thursday, 25 July 2019**, at 8.30 a.m. and at 5 p.m. (CET). Participation in the webinar is free of charge; registration possible [here](#).

All information relating to the 23rd International Passive House Conference in China can be found here: <https://passivhaustagung.de/en/>

INTERNATIONAL PASSIVE HOUSE CONFERENCE 2019

Organisers:



With the special support of:



General Information

Passive House buildings

In Passive House buildings, heat loss is drastically reduced - by means of high-quality thermal insulation, an airtight building envelope, and windows with triple glazing. In winter, preheated air is introduced into the building by a heat recovery ventilation system. In summer, the excellent level of insulation ensures that the heat stays outside.

The altogether five basic Passive House principles allow these highly efficient building 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 per cent less heating energy than existing buildings and 75 per cent less energy than the 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 came into effect in January 2019 for public buildings and will apply for all other buildings starting in the year 2021.

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. After extensive technical testing, building physicists attest to the still unimpaired functioning of the first Passive House and its unchanged low heating energy consumption. With its newly installed photovoltaic system, the first Passive House now utilises renewable energy and has received the Passive House Plus certificate for this reason.



The world's first Passive House building in Darmstadt-Kranichstein.
© Peter Cook

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 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 under construction in Frankfurt am Main. The interest in Passive Houses is also 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 internationally in regard to research and development in the field of energy efficient construction.



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23rd International Passive House Conference

The Passive House Institute will be hosting the 23rd International Passive House Conference in Gaobeidian, China from 9 - 11 October 2019. www.passivhaustagung.org
The 24th International Passive House Conference will take place in the autumn of 2020 in Berlin.

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