

## **Press Release**

13 June 2022



The Passive House certificate for the new, highly energy efficient training centre of the Chamber of Crafts was presented by the state minister Daniela Schmitt (second from the left) and Jessica Grove-Smith of the Passive House Institute (second from the right) to the managing director Axel Bettendorf (left) and president Rudi Müller (right). © Passive House Institute

# "A Passive House Masterpiece"

Passive House certificate for new training centre – prime minister commends Chamber of Crafts

Darmstadt/Trier, Germany. This campus sets new standards: trainees acquire skills in modern workshops in a highly climate-friendly building. In a first for Germany, the Chamber of Crafts of the city of Trier has built its new training centre to the Passive House standard. It has now been awarded the Passive House certificate. The state prime minister commended this highly efficient new build a "Passive House Masterpiece". The campus has drawn attention nationwide.

26 workshops, more than 400 workshop spaces, 180 trainee places and a canteen: the Crafts Campus in Trier offered the attendees of the official inauguration the opportunity to take a closer look at the highly energy efficient new build with workshops with modern equipment. The Chamber of Crafts of the city of Trier gave two reasons for building its "Passive House Masterpiece" - as Rhineland-Palatinate federal state prime minister Malu Dreyer described it. The intention behind this was to make apprenticeships more attractive. In addition, the new building is meant to be future-oriented and uses significantly less energy compared to the previous structures from the 1960s and 1970s.



26 modern workshops for various trades disciplines are available on the Crafts Campus in Trier, including a workshop for training in the field of painting and coating. © BIBB, Rothbrust



The exterior view and a glimpse into the multi-level foyer of the Crafts Campus. The Chamber of Crafts of Trier has implemented its new training centre to the highly efficient Passive House standard, the first to be built in Germany. "This decision has turned out to be the right one", emphasised managing director Axel Bettendorf. © Passive House Institute



Federal state prime minister Dreyer commended the Trier Chamber of Crafts for its "Passive House Masterpiece". © Passive House Institute

#### **Certified quality**

The new Crafts Campus is the only training centre to be built to the highly energy efficient Passive House standard in Germany to date. Quality assurance was performed by the Passivhaus Dienstleistung GmbH. The high efficiency quality standard has been confirmed, for which the state minister Daniela Schmitt and Jessica Grove-Smith of the Passive House Institute presented the Passive House certificate to the Trier Chamber of Crafts. "This beacon project with numerous workshops and therefore special requirements demonstrates that even extremely complex buildings can be built in an energy efficient manner. We hope that this project will be followed by many others for climate protection", says Jessica Grove-Smith. The Trier Chamber of Crafts has also been awarded the climate protection plaque of the German state of Rhineland-Palatinate.

#### Setting the course early on

The Trier Chamber of Crafts had already set the course for this beacon project early on in 2014. For the chamber, it was clear that vocational training with a practical focus should become more attractive for young people as well as their parents through modern workshops. This will also counteract the shortage of skilled workers, emphasised the president of the Chamber of Crafts in Trier, Rudi Müller, during the inauguration. With regard to climate protection and rising energy prices, the Chamber defined another requirement for itself – and others: a high level of efficiency of the building so that the energy demand for heating and cooling becomes significantly lower.



Workshops and classrooms for automotive mechatronics, metal-working and dental technology. © Passive House Institute

## "The right decision"

The Ministry of Economic Affairs of the state of Rhineland-Palatinate had an open ear for the plans of the Chamber of Crafts. In Gerhard Wolf, an architect from Stuttgart, they found an expert who had already implemented the Passive House standard in many building projects. "As we can see currently concerning the energy market, this was the right decision", says Axel Bettendorf, managing director of the Trier Chamber of Crafts, during the official inauguration of the campus. In addition, the photovoltaic system on the roof of the new building meets part of the electricity demand of the training centre.

### Getting everyone on board

The new build includes 10,000 square metres of useable area. Here, the young apprentices can acquire skills in twelve trade disciplines to supplement in-company vocational training. They can attain master crafts qualifications in eleven trade disciplines, which include the fields of electrical engineering, automotive mechatronics, plumbing, heating and air-conditioning, metal-working and dental technology. Besides profiting from the modern workshop facilities, students and teachers at the campus also benefit from the healthy indoor climate inside the highly energy efficient building. "We got all stakeholders on board right from the start and asked them what they needed in the new building. That was an important process. The effort has paid off; we are all benefiting from our modern and climate-friendly building", summarises Thomas Sandner. As project head, the Trier Chamber of Crafts director was heavily involved in the new construction of the training centre.



Workshop for training carpenters, photovoltaic system on the roof of the new Crafts Campus, and attendees of the official inauguration. © Passive House Institute

#### Ventilation system advantages

The workshops were already relocated to the new building in 2019, so the building has already been tested in everyday use. The official inauguration of the campus was delayed due to the pandemic. Sandner explains that the training centre has performed comparatively well throughout this pandemic and sees in this yet another advantage of the excellent ventilation system in the building. Together with the Passive House Institute, the Chamber of Crafts of Trier has prepared an easy-to-understand handbook so that users can familiarise themselves with this highly energy efficient building. According to Sandner, other Chambers of Crafts whose buildings are in need of modernisation have already expressed interest in examining the model project in Trier.

Further information on this project can be found in the **Passive House database** and obtained from the **Chamber of Crafts of Trier** (in German).

#### **General information**

<u>#Efficiency NOW:</u> The call of the hour is to save fossil energy. To achieve this, the Passive House Institute has started the #EfficiencyNOW campaign. The research institute explains how each one of us can contribute towards becoming more independent of fossil energy, and ultimately phasing it out altogether. <u>Passipedia</u>

<u>Latest report of the IPCC:</u> "The time window remaining to us becomes smaller and smaller the longer we defer protection of the climate and adaptation" – this is what Hans-Otto Pörtner of the UN Climate Council IPCC had to say in February 2022. Solving the problems of supply security and climate protection in the building sector means highly energy efficient new constructions and retrofits. <u>Video</u>.

Passive House buildings: With the Passive House concept, the heat loss that typically takes place in buildings through the walls, windows and roof is drastically reduced. By applying the five basic principles – 1. excellent thermal insulation, 2. windows with triple glazing, 3. a ventilation system with heat recovery, 4. avoidance of thermal bridges, 5. an airtight building envelope – a Passive House building needs very little energy. For this reason, Passive House buildings can dispense with a *traditional* heating system. 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.

<u>Advantages of Passive House buildings:</u> In a Passive House building, in winter the heat is retained for a very long time since it escapes very slowly. In the summer (and in hot climates), the excellent level of insulation ensures that the heat stays outside. Therefore, active cooling usually isn't necessary in residential buildings (in Central Europe). Due to the low energy costs in Passive House buildings, the utility costs are predictable - which is a fundamental principle for affordable homes and social housing. The Passive House standard meets the requirements of the EU for Nearly Zero Energy Buildings (NZEB).

<u>Passive House and renewable energy:</u> The Passive House standard and generation of renewable energy directly on-site or near the building is a good combination. The world's first Passive House building in Darmstadt has also been producing renewable energy since 2015 by means of a subsequently installed photovoltaic system, and received the *Passive House Plus* certificate for this reason.

<u>Building types:</u> 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. The first Passive House hospital has just received its Passive House certificate and starts operation in Frankfurt in Autumn 2022.

<u>Passive House Institute:</u> The Passive House Institute was founded by Professor Wolfgang Feist in 1996 as an independent research institute. The Passive House Institute holds a leading position with regard to research and development in the field of energy efficient building construction and deep retrofits.

<u>iPHA:</u> The network iPHA – international Passive House Association – is an important contact point for all those involved in construction. The aim is to convey knowledge relating to highly energy efficient construction and retrofits, as well as networking.

Social Media: Twitter: @the\_iPHA // Facebook: International Passive House Association

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The world's first Passive House building in Darmstadt, Germany recently celebrated its 30th anniversary.

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Prof Dr Wolfgang Feist © Peter Cook