

Passive House meets social goals

#EfficiencyFirst: Highly energy efficient buildings support aims of United Nations

Darmstadt, Germany. The United Nations set 17 Sustainable Development Goals to be reached by 2030. Envisioned as a “blueprint to achieve a better and a more sustainable future for all”, the goals cover a wide array of fields and topics. With a new article and accompanying infographic, the International Passive House Association illustrates how highly energy efficient buildings built to the Passive House standard play a direct role in achieving these global aims.

The article “Passive House and the Sustainable Development Goals (SDGs): Connecting an international building standard with global aims” comes at a time when policymakers and the private sector are making decisions about the direction their building guidelines and business development will take. The article details the performance-based Passive House standard with its transparent quality-assurance processes and application for both new-builds and retrofits across all climate zones.

Climate protection

These aspects distinguish the Passive House standard from other efficiency based or marketed approaches. They connect the Passive House standard not only to the global SDGs, but also to local climate protection efforts. “In many urbanised environments, rather than new builds, accomplishing a sustainable existing building stock is the major focus. In order to realise sustainable management and efficient use of natural resources in the building sector, a renovation wave will be necessary”, explains the International Passive House Association (IPHA).



Better health

For highly energy efficient refurbishments, the Passive House Institute has developed the EnerPHit standard, also a performance based standard with quality assurance processes. It prevents energy lock-in, which keeps many countries from attaining their Renovation Wave and Green Deal goals. With the corresponding infographic, iPHA demonstrates the ways in which the Passive House standard can lead to better health as well as social, economic, and environmental outcomes. The newest addition to the current



Highly energy efficient buildings lead to better health as well as social, economic, and environmental outcomes. Therefore, homes like these social housing Passive House buildings in the Austrian city of Kufstein play a direct role in achieving the UN's Sustainable Development Goals. © NHT

#EfficiencyFirst campaign of the international network iPHA highlights that due to the Passive House's grounding in scientific, performance-based criteria, the reduction of energy demand and carbon emissions is substantial and unparalleled. The article and infographic are published on the Passive House Institute's database Passipedia. www.passipedia.org.

Sustainable built environment

Together with its 22 partner organisations, the International Passive House Association (iPHA) has been running the "Efficiency: The First Renewable Energy #EfficiencyFirst" campaign throughout 2021. The campaign aims to raise awareness for the vital role energy efficiency in buildings plays in meeting our climate goals. The campaign also demonstrates that energy efficient buildings provide a comfortable, healthy, and sustainable built environment. Embodied or upfront carbon reductions of less efficient buildings are being overwhelmed by operating emissions over the building's lifecycle. Equally, converting to an all renewable energy future is not possible unless energy efficiency is achieved at scale.



The winner of the contest #ExplainPassiveHouse demonstrates the difference between a Passive House home and a conventional building by using... Just have a look at the [video](#).

interviews with women driving the Passive House industry for International Women's Day and hosting a successful #ExplainPassiveHouse competition, asking entrants to provide visual examples explaining the Passive House concept. The **winning entry** and other **honourable mentions** are available to view on the **iPHA YouTube channel**.

#EfficiencyFirst

The campaign **#EfficiencyFirst** began in February this year, when the global network iPHA uniting Passive House experts and enthusiasts alike, published an informational flyer available in over 14 languages. Detailing the benefits of Passive House, the flyer delves into why everyone should think #EfficiencyFirst when tackling building projects. Other activities have included a range of

Restore our Earth

To mark the occasion of Earth Day 2021, with its theme “Restore our Earth”, the group launched videos presenting how the Passive House approach contributes to a positive future for our built environment. The videos are available in a range of languages and regional versions including Spanish; Mandarin; French, and can also be viewed on the iPHA YouTube channel or website.



Two events

The campaign **#EfficiencyFirst** will continue throughout 2021. Among the activities is an **Ice Box Challenge** that is scheduled for July in Glasgow, UK, location of the next UN climate conference (iceboxchallenge.org). Another highlight is the **25th International Passive House Conference**, taking place online and in-person in Wuppertal, Germany in September. <https://passivehouseconference.org>.

General information

Passive House buildings

With the Passive House concept the heat loss that typically takes place in buildings through the walls, roof and windows is drastically reduced due to high-quality thermal insulation, windows with triple glazing, avoidance of thermal bridges, an airtight building envelope, and a ventilation system with heat recovery. This ensures that Passive House buildings can manage without a *traditional* building heating system. They 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. In Passive House buildings, the utility costs are foreseeable - a fundamental principle for affordable homes and social housing.

Pioneer project

The first Passive House in the world was built in Darmstadt, Germany, 30 years ago by four private homeowners. Prof Wolfgang Feist was one of them. These terraced houses have been regarded as a pioneer project for the Passive House standard. With its newly installed photovoltaic system, this flagship Passive House now utilises renewable energy and received the Passive House Plus certificate for this reason.



The world's first Passive House building in Darmstadt, Germany.
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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.

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 with regard to research and development in the field of energy efficient construction.



Prof Wolfgang Feist
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Social Media

Twitter: @the_iPHA // **Facebook:** the International Passive House Association // Hashtag for the 25th International Passive House Conference **#25intPHC**

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