

ORGANISERS AND CONFERENCE OVERVIEW

Organisers of the 20th International Passive House Conference:



Under the patronage of:

Tarek Al-Wazir

Ministry of Economics, Energy, Transport and Regional Development, State of Hessen



» Registration by post:

Passive House Institute | Rheinstraße 44/46
64283 Darmstadt | Germany

» Detailed information and online registration:

www.passivehouseconference.org

» 2016 Conference schedule

20 April 2016	Passive House Basics Course (DE)
21 April 2016	Workshop programme: Window workshop (EN) Ventilation for retrofits (EN) Cooling and dehumidification (EN) Tips and tricks for designPH (DE+EN) Planning non-residential buildings with PHPP (DE) Deep retrofits with PHPP (EN)
22-23 April 2016	20th International Passive House Conference and Passive House Exhibition
22 April 2016	Passive House Party
24 April 2016	Passive House excursions

» Conference languages: German and English

Simultaneous translation into English will be provided at all German language sessions. For other international groups please contact us.

Supported by:



SINFONIA stands for "Smart Initiative of cities Fully Committed to Invest In Advanced large-scaled energy solutions" and is funded under the 7th Framework Programme for Research and Technological Innovation.

CONFERENCE FEES | FURTHER OFFERS

All prices include VAT

Conference 22 and 23 April 2016, incl. Passive House Party

Early booking rate (registration by 20 February 2016, payment before 27 February 2016)	€560
Regular rate	€690
Speaker rate	€210
Poster presenter rate (Only one speaker/poster presenter discount will be granted for each accepted oral and/or poster contribution)	€380
Student discount (Full-time students only; copy of valid student ID must be enclosed with registration)	50%

One-day conference participation

Early booking rate (registration by 20 February 2016, payment before 27 February 2016)	€410
Regular rate (Please note that no speaker/poster presenter discount is available for one-day conference participation)	€510

Cultural Excursion, Saturday, 23 April, 8:00pm

Only open to conference participants, registration required service charge €5

Passive House excursions: Sunday, 24 April	€95
Guided tour (For conference participants only; limited space available)	€95
iPHA member discount on prices listed above	10%

Workshops (Wednesday, 20 April and Thursday, 21 April)

Passive House Basics Course (DE)	€150
Conference participant	€390
Standard price	€20
Student price	€20
Window workshop (EN)	€360
Conference participant	€540
Standard price	€240
Ventilation for retrofits (EN)	€360
Conference participant	€240
Standard price	€360

Cooling and dehumidification (EN)

Conference participant	€240
Standard price	€360

Tips and tricks for designPH (DE+EN)

Conference participant	€160
Standard price	€240

Planning non-residential buildings with PHPP (DE)

Conference participant	€240
Standard price	€360

Deep retrofits with PHPP (EN)

Conference participant	€240
Standard price	€360
iPHA member/student discount for above sessions	€60

TERMS AND CONDITIONS

» 1. Registration

Registrations must be either submitted online or by post. Registrations are binding and will be processed in the order in which they are received. The number of participants is limited. After registration, you will receive an invoice. The **early booking** discount can only be granted **if the registration is made before 20 February and payment is completed before the 27 February**. Only those who have paid the applicable fees in full will be admitted to the conference. Only cancellations in writing will be accepted. All cancellations after 20 February 2016 will incur a €70 processing fee while cancellations made as of 20 March 2016 will incur a fee equal to 50% of the total registration fees. The participation fee is to be paid in full in the case of no-shows or cancellations on, or after the 30 of March 2016; a substitute participant may, however, be nominated.

» 2. Services

The scope of services includes: the conference proceedings with all written contributions, lunch, coffee breaks, participation in the Friday Passive House Party and simultaneous translation into English at all German language sessions. The organisers reserve the right to make any necessary changes to the programme.

» 3. Cancellation, limitation of liability

In the event that the 20th Passive House Conference or any part of the framework programme must be cancelled, the participants will be notified immediately and any participation fees already paid will be reimbursed. The liability of the organisers is limited to reimbursement of the paid participation fee only.

» Scientific conference advisory board

Kristin Bräunlich, Darmstadt (DE) | Nuria Diaz Anton, Madrid (ES) | Wolfgang Feist, Innsbruck (AT) | Werner Friedl, Darmstadt (DE) | Harald Halfpaap, Hannover (DE) | Bjorn Kierulf, Senec (SK) | Helmut Krapmeier, Dornbirn (AT) | Simone Kreutzer, Växjö (SE) | Benjamin Krick, Darmstadt (DE) | Mathias Linder, Frankfurt (DE) | Tobias Loga, Darmstadt (DE) | Dirk Mobergs, Wuppertal (DE) | Francesco Nesi, Pergine Valsugana TN (IT) | Stefan Pallantz, Nea Ionia Athens (GR) | Søren Pedersen, Næstved (DK) | Rainer Pfluger, Innsbruck (AT) | Ludwig Rongen, Wassenberg (DE) | Jan Steiger, Darmstadt (DE) | Rolf-Peter Strauß, Bremen (DE) | Anke Unverzagt, Hannover (DE) | Etienne Vekemans, Paris (FR) | Mark Zimmermann, Dübendorf (CH)

EXCURSIONS | SUNDAY, 24 APRIL 2016

» Excursions

On Sunday, 24 April 2016, conference participants will have the opportunity to tour Passive House buildings that are either already completed or under construction. All excursions include travel, the tour itself in either English, or German with translation into English as well as a small meal and drinks. Space is limited.

Meeting point: darmstadtium | Darmstadt

Excursion 1 | Darmstadt | 9:00am - 2.00pm

The excursion will end at the **Darmstadt Train Station**
First Passive House Darmstadt Kranichstein | Residential Passive House buildings in Darmstadt

Excursion 2 | Darmstadt | 9:00am - 5:00pm

The excursion will end at the **Darmstadt Train Station**
First Passive House Darmstadt Kranichstein | Residential Passive House buildings in Darmstadt and area.

Excursion 3 | Heidelberg | 9:00am - 5.00pm

The excursion will end at **4:00pm at the Heidelberg Train Station or 5:00pm at the Darmstadt Train Station**
The world's largest Passive House district- Bahnstadt.

Excursion 4 | Frankfurt | 9:00am - 5.00pm

The excursion will end at **4:00pm at the Frankfurt Train Station or 5:00pm at the Darmstadt Train Station**
Residential and non-residential buildings

Excursion 5 | Wiesbaden | 9:00am - 5.00pm

The excursion will end at **4:00pm at the Mainz Train Station or 5:00pm at the Darmstadt Train Station**
Residential and non-residential buildings

Please note that this programme is subject to change.

For programme details on these excursions, please visit:

www.passivehouseconference.org

Photo credits:

Cover photo left: RH Darmstadt, Architecture: Prof. Dr. Bott / Ridder / Westermeyer, ID 0195 | Cover photo right: Row house complex Darmstadt, Architecture: faktor10 | Cover photo below: Kindergarden, Architecture: Ramona Buxbaum Architekten, ID 2183, Photo © Thomas Eicken Architekturfotografie

2016 PASSIVE HOUSE EXHIBITION

» Exhibition

Passive House components provide maximum comfort with low energy costs in new builds and refurbishments alike. Whether you are looking for insulation materials, windows or ventilation systems with heat recovery – all leading manufacturers of Passive House components will be represented at the accompanying trade fair. Here you will find first-class advice, information materials, illustrative models, and experts happy to answer your questions.

Date: Friday and Saturday, 22 and 23 April 2016

Venue: darmstadtium

Schlossgraben 1

64283 Darmstadt, Germany

Times: 22 April 2016, 9:00am - 7:00pm

23 April 2016, 9:00am - 5:00pm

» Exhibition area themes

- Insulation
- Windows and doors
- Ventilation systems with heat recovery, compact heat pumps, subsoil heat exchangers, stoves and heating systems, solar collectors
- Measuring devices for airtight construction and ventilation techniques, infrared cameras
- Products for ensuring airtightness
- Prefabricated buildings and building components
- Contracting businesses, trade associations, architectural and engineering firms, energy consultants, quality assurers
- Software, specialist literature, advanced training
- Renewables for Passive House buildings

» Target groups

Architects, designers, engineers, energy consultants, energy suppliers, tradespeople, scientists and researchers, retailers, manufacturers, local authorities, property developers, students

» To order an exhibitor info pack, please contact:

Janna Breitfeld | Passive House Institute

Tel.: +49(0) 6151/826 99 63

E-mail: janna.breitfeld@passiv.de



20TH INTERNATIONAL PASSIVE HOUSE CONFERENCE 2016

and Exhibition

Building a sustainable future!



25 years
Passive
House

Programme

darmstadtium Congress Center

Darmstadt | Germany

22 and 23 April 2016

Workshops & Excursions 20 – 24 April 2016



REGISTRATION

- » **Online registration at www.passivehouseconference.org**
- » Paper registration form below

- » PLEASE MARK YOUR CHOICE
- Early booking (registration by 20 Feb 2016, payment before 27 Feb 2016)
- iPHA member
- Speaker accepted by the scientific advisory board
- Student (copy of student ID enclosed)

- Both Friday and Saturday, 22 and 23 April 2016**
- Friday, 22 April 2016 only**
- Saturday, 23 April 2016 only**

- » **Framework programme:**
All workshops will take place on 21 April 2016

- Workshop** _____
(please fill in title, for programme visit www.passivehouseconference.org)

- Passive House excursion, Sunday, 24 April 2016***
***(Only for registered participants of the conference)**

Family name, first name: _____

Organisation: _____

Street address: _____

City and postal code: _____

Country: _____

Phone/Fax: _____

Email: _____

- I hereby acknowledge and accept the terms and conditions as outlined in this flyer for the 20th Passive House Conference 2016 and side events. I also understand that the liability of the organiser is limited to the participation fee paid.
- Please accept my registration for the 20th Passive House Conference and side events, to be held in Darmstadt, Germany from 20-24 April 2016. I am aware that my registration is binding.

City, Date: _____

Signature: _____

WORKSHOP PROGRAMME

E-learning Passive House Basics Course offered.
More information available online.

Wednesday, 20 April, 2016:

Passive House Basics Course (DE) 9:00am-5:00pm

Principles of the Passive House concept will be taught as well as basic practical tips.

Thursday, 21 April, 2016

Window workshop (EN) 9:00am-6:00pm

The global demand for highly efficient and cost-effective windows exceeds the present production expertise and leads to market gaps. This seminar contributes to the exchange of expertise on high-performance windows to address this issue.

Ventilation for retrofits (EN) 9:00am-1:00pm

The ventilation workshop is focused on cost efficient ventilation for refurbishments of residential building. Challenges like the integration of ventilation devices and duct work as well as new air distribution concepts and fire protection will be discussed. The specific ventilation solution of the winners of the Component Award 2016 will be presented.

Cooling and dehumidification (EN) 2:00pm-6:00pm

The workshop will provide an overview of cooling and dehumidification strategies in Passive Houses. Starting from considerations on how to minimize the useful energy demand for cooling, we will focus on the possibilities of providing and distributing cooling in residential Passive Houses in warm climates, energy-efficiently, cost-efficiently and effectively.

Tips and tricks for designPH (DE) 9:00am-1:00pm, (EN) 2:00pm-6:00pm

The workshop will cover advanced use of designPH, with a focus on sharing tips, tricks and experiences that can be used for interrogating and troubleshooting the model, optimising the design and modelling more complex building geometries.

Planning non-residential buildings with PHPP (DE) 2:00-6:00pm

Workshop participants will learn how non-residential buildings can be optimally calculated and planned using PHPP.

Deep retrofits with PHPP (EN) 9:00am-1:00pm

We recommend this workshop to anyone who wants to know how PHPP can help you with planning and verification of deep retrofits. We will present PHPP's numerous features and capabilities for application to the building stock - before as well as after energy retrofit. We will also focus on the specifics of EnerPHit verification according to component quality or heating/cooling demand. You will learn how the EnerPHit classes Plus or Premium can be achieved by complementing energy efficiency with renewable energy generation.

Workshops will all be situated in Darmstadt. Exact locations can be found online. www.passivehouseconference.org



The Component Award 2016 is part of the EU-funded project



More Information: www.europhit.eu

FRIDAY PROGRAMME | 22 APRIL 2016

Plenary | Hall Spectrum (Level 1)

9:00am Opening remarks by State Secretary Mathias Samson, Ministry of Economics, Energy, Transport and Regional Development, State of Hessen | Jochen Partsch, Mayor of Darmstadt | Brigitte Holz, President of the Chamber of Architects and Urban Planners, Hessen

9:45am Passive House – the long-lasting solution | Wolfgang Feist

Hall Spectrum (Level 1)

Session 1: Passive House Plus

1:00am Alexandra Frankel, Martina Feirer | Green-House: Austria's first Passive House Plus student dormitory in Vienna
Gernot Valentin | A new Passive House Plus administration building
Engelbert Spiß | The first Passive House Plus apartment building
Lars Beckmannshagen | Experience from the Efficiency House Plus network for Passive House Plus and Premium
Georg W. Reinberg | Strategy, implementation, and monitoring of a plus-energy Passive House
Benjamin Krick | A straw bale Passive House Plus building

Hall Titanium (Level 2)

Session 2: New projects and components

Georg W. Zielke | Oikos: A residential Passive House neighbourhood project
Simone Kreuzer | Circuitus – What goes round comes round
Klaus Wemeke | Affordable and sustainable: A timber Passive House row house
Wolfgang Hasper | A government building extension overcomes all challenges
Ludwig Rongen | Passive House today and beyond 2016: Developments and trends
P: Nadine Böttlich | Balcony connections: The trend in technology toward highly efficient Passive House components

FRIDAY PROGRAMME | 22 APRIL 2016

10:30am Group visit to the exhibition
12:00am LUNCH BREAK

Hall Europium (Level 3)

Session 3: EnerPHit – latest retrofit projects

Laura Nettleton | EnerPHit in the U.S.: Multi-unit residential and commercial retrofit case studies
Floris Keverling Buisman | Historic 1870 2-whyte brick house to EnerPHit standard in Upstate New York
Michael Ungui, Kevin Brennan | A collaborative approach to historic masonry retrofits
Reimar von Meding | Reimarkt: first supermarket for sustainable retrofit products
P: Aline Branders, Sebastian Moreno-Vacca | Large-scale total Passive House renovations
P: Martijn Jansen | EnerPHit DeNijverheid, from run-down industrial monument to high-quality dwelling
P: Constance Luytbroeck | Installing geothermal boreholes under a historical building in the city-centre of Liège
P: Dominykas Marcionis | Retrofit of large concrete panel buildings with prefabricated timber elements
P: Alan Budden | Domestic Retrofit to Passivhaus Standard using Carbon Payback
P: Marco Pietrobon | Analyses of multifunctional wooden components for passivhaus renovations of schools

Hall Helium 2 (Level 3)

Session 4: Warm climates

Oliver Style | Measured performance of lightweight straw bale Passive House in a Mediterranean heat wave
Nasia Roditi, Stefanos Pallantzias | Passivistas: the house project
Esteban Pardo Calderón | Passive House Standard in Public Buildings in North Spain
Tugba Salman Gurcan | A comparison of LEED and Passive House Certification on a built example-Gaziantep Yesil Ev
P: Marco Pietrobon | Comfort conditions and user behaviour surveys in passive house buildings throughout Europe
P: Ramón Ruiz-Cuevas-Peña | Passive House in Vitoria-Gasteiz, Spain
P: Romeu Vicente | Design, Optimisation and Construction of a LSF Efficient House in a South European Country
P: Paris A. Fokaides | Monitored performance of a Passive House under subtropical climatic conditions
P: Enrico Bonilauri | The first certified construction system for warm climates: from prototype to production

SATURDAY PROGRAMME | 23 APRIL 2016

Plenum | Hall Spectrum (Level 1)

9:00am Opening remarks by Wolfgang Feist
9:15am Plenary Session

Hall Spectrum (Level 1)

Session 9: Ventilation solutions

10:30am Kristin Bräunlich | 2016 Component Award results
Rainer Pfluger | Reducing ventilation duct networks: Retrofit of the Siegmair School as part of the EU-funded project SINFONIA
Norbert Stärz | Central stairwell ventilation in multi-family dwellings
Bernhard Martin | More efficient ventilation with intelligent active overflow systems
Andrew Fair, Sally Godber | MVHR in the UK – lessons learnt from commissioning & a new "final protocol sheet"
Andrew Peel | Assessing the true performance of Heat Recovery Ventilators
P: Adrian Tschui | Professionally planned ventilation systems
P: Alexander Wien | A flat-ceiling system with an integrated air duct network
P: Tomas Mikeska | Concept of PHI certification for split-type air-to-air heat pumps

Hall Titanium (Level 2)

Session 10: Components for retrofits and new constructions

Benjamin Krick | EuroPHit: windows in incremental retrofits
Franz Freundorfer | Cross-trade retrofit systems: EnerPHit Innovation
Jan Tywoniak | Lightweight timbered element façades for modified buildings
Eckart Drössler | Retrofit to an age-inclusive small Passive House multi-family dwelling
Oliver Ottinger, Tanja Schulz | Interior insulation: what works?
P: Martin Giebler | Long-lasting adhesive joints
P: Adrian Muskatewitz | Guidelines for Passive House-suitable attic stairs
P: Susanne Theumer | The effects of thermal bridges in a typical Franconian house built in 1959

Hall Europium (Level 3)

Session 11: Tools – new features and latest developments

Anne Vogt | Using PHPP 9 in the design process in order to achieve the first PH Premium buildings in Spain
Sergio Suarez | COMPENDIUM: Monitoring equipment project, especially designed for Passive Houses
David Edwards | Latest developments in designPH - the 3D interface for PHPP
Bronwyn Barry | Optimizing Passive House: A look at Kranichstein (and other projects)
Fabian Ochs | "Auditing tool" PHPP – new features and comprehensive validation
P: Gabriel Rojas | Accuracy in predicting energy consumption and room temperatures of various simulation programs
P: Oliver Ottinger | Determination of the heat loss coefficient of built Passive House buildings
P: Dragomir Tzaney | The New Building Knowledge Hubs of Europe: Successful promotion of PH training
P: Jens-Erik Weber, Benjamin Krick | A new database for Certified Passive House Components

Hall Helium 2 (Level 3)

Session 12: Passive Houses in North America and cold climates

Yetsuh Frank | New York City: Active about Passive Buildings
Sonia Zouari, Malcom Isaacs | Reaching for the PH Standard in Canadian Social Housing
Monte Paulsen | Factory-built Passive House: An affordable solution for remote Canadian communities
Tomas Lindgren | Höögskolan in Knivsta – a Passive House school in Sweden
Juha Päätaalo | The first Passive House residential home for the elderly in Finland
P: Tomaz Stich | 1st Certified Passive House in Alberta, 100% wood based products and Off Grid
P: Tessa Smith | Island Passive House

3:30pm COFFEE BREAK

Session 5: Long-term experiences

Gernot Valentin | Twelve years in the Aufkirchen Montessori school
Thomas Kirtschig | ENERCON Passive House office: Findings from more than ten years of monitoring
Carl Zeine | KWEFF2015: Consumption values of highly efficient buildings
Gerrit Horn | Two decades of timbered Passive House
Olaf Reiter | Five kindergartens in Saxony: Construction system analysis and a critical review
Feist, Ebel, Peper, Hasper | The Passive House prototype in Darmstadt-Kranichstein: Long-term experience and measurements

Session 6: Non-residential buildings

Ingo Höfle, Bernd Haase | Passive House offices with renewable energy supply on the path to a Passive House Premium
Walter Krämer | Summer conquered: The Lu-teco office building
Esther Gollwitzer | Bambados: A Passive House indoor swimming pool in practice
Stefan Oehler | Comprehensive retrofit of the Groß-Umstadt Sparkasse
Oliver Kah | The importance of use-specific energy applications in nonresidential Passive House
P: Werner Haase | Sonthofen High School: Comprehensive Factor 10 retrofit of a school
P: Werner Haase | Energy retrofit of a post-WWII church into a solar-powered plus-energy church

Session 7: Cost-effective Passive House buildings

Robert Schild | Must living in comfort be profitable?
Alan Clarke | Simple and cheap heating systems for individual Passive Houses
Maia Williams | First privately rented EnerPHit home in London, Whole Life Carbon story
Timothy McDonald | The PHFA Project: A National Net-Zero-Energy Affordable Housing Initiative
Mario Bodem | Passive House school project - Cost reduction through the Passive House Standard
P: Peter Schneider | Achieving Zero-Net Energy Affordably Today: The Modular Housing Innovation Project
P: Siena Shaw | MightyHouse - Tiny House Passive House Combined

Session 8: Experiences from UK and Ireland

Elrond Burrell | How architects can drive adoption of Passivhaus for primary schools in England and Wales
Jonathan Hines | Closing the performance gap in UK schools, 3 years of energy and comfort monitoring evidence
Nick Grant | First Passivhaus Archive in the UK
Mark Siddall | Long Term Experience of The Passivhaus Standard in North East England
Mariana Moreira | EnerPHit for Social Apartments: marrying old and new
P: Shane Colclough | Review of the performance of Passive Houses on the island of Ireland over a 10 year period
P: Frances Wright | Development of a Scottish Straw Bale Wrapped Timber Frame Passivhaus Construction System
P: Ed O'Donoghue | Building on solid foundations - Solutions for Passive House

1:00pm LUNCH

Session 13: Passive House districts and major projects

Soren Peper, Robert Persch | Monitoring in the Passive House neighborhood Bahnstadt Heidelberg
Ralf Bermich | Passive House neighborhood Heidelberg-Bahnstadt in the eyes of its residents
Thomas Lilje | Student dormitory complex in Münster: More than 500 units built to the Passive House Standard
Günter Lang | Passive House more affordable than conventional construction: How?
Nico Steinmetz | Luxembourg-Kirchberg: Public Passive House housing in the Grünwald
P: Ulrike Leidinger | Passive House at the municipal level: non-residential buildings caught between cost pressures and high expectations
P: Frank Zimmermann | Energy-focused retrofits of schools in Rhineland-Palatinate
P: Martin Giebler | Extensive retrofits of large buildings: Can air tightness be measured in sections?

Session 14: Passive House and renewables

Rainer Valentin | PER analysis and the new Passive House classes: A critique
Benjamin Krick | Heating with electricity: Is it (still) bad? What does the PER cost?
Marc Großklos | Performance data for an electricity storage system in a large Passive House Plus building
Tobias Loga | PV power generation to cover domestic power demand in Passive House: A parameter study
João Marcelino | The impact of the standby consumption in a Passive House
P: Evelyn Buteikyte & Werner Friedl | PER: EnerPHit Premium, Plus, Classic - a retrofitted residential building with PH components
P: Monika Hall | Are zero-energy high rises feasible?
P: Daniela Armerding-Drexler | Passive House and e-mobility: A beneficial combination over a lifecycle

Session 15: Step-by-step retrofits

Jan Steiger | Overall retrofit plan for step-by-step retrofits to EnerPHit standard
Art McCormack | Step-by-Step EnerPHit Retrofit: coordinated design
Helen Brown, James Traynor, Nick Newman | Large scale EnerPHit. Whole life costs and lessons learnt on high rise retrofit
Zack Norwood, Ingo Theobald | Step-by-step deep retrofit and building integrated façade/roof on a million program house
Nuria Diaz Antón | Step by step retrofits to EnerPHit standard in social housing in Spain
Iglia Lutzkanova | A road towards deep building renovation on a step-by-step basis in Bulgaria

Session 16: China goes passive *

Ling Guo | Passive House in China: Present Situation and Future Trends
Yuansheng Cui | Present Situation, Problems and Countermeasures for Passive House Construction in China
Stefan Schirmer | Experiences and challenges of heating and cooling in Chinese pilot projects
Michael Meyer-Obersleben | Experiences from 11 blower door tests in the Middle Kingdom - China builds Passive Houses
Jürgen Schneider | Passive House design in different Chinese climates – it works everywhere
Berthold Kaufmann | Good user-experiences from first Passive House buildings in China

* Further information on other high-profile Chinese presentations available online.

4:45pm COFFEE BREAK

PLENARY SESSION | Hall Sepctrum (Level 1)

5:15pm Ernst Ulrich von Weizsäcker, Franz Alt, Wolfgang Feist
Panel discussion: Sustainable energy for all
6:00pm End of event

Abbreviation: (DE) = german | (EN) = english

P: Short presentation (Poster)

Programme is subject to change