

Organisers of the 17th International Passive House Conference:



Patronage:

**Lucia Puttrich**  
Minister of the Environment, Energy, Agriculture, and Consumer Protection for the State of Hesse



### » Registration by post:

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

### » Online registration:

www.passivehouseconference.org

### » 2013 Conference schedule

17 April 2013	Passive House Basics Course   University of Applied Sciences Frankfurt
18 April 2013	Passive House Components Workshop   Congress Frankfurt
19-20 April 2013	17th International Passive House Conference and Exhibition   Congress Frankfurt
21 April 2013	Passive House Excursions

### » Conference languages: German and English

Simultaneous translation into English will be provided at all German language sessions.

Supported by:



### » Conference: Friday and Saturday, 19 and 20 April 2013

<b>Early booking rate</b> (by 15 February 2013):	€530
Regular rate:	€650
Speaker rate:	€190
Poster presenter rate:	€360
(Only one speaker/poster presenter discount will be granted for each accepted oral and/or poster contribution)	
<b>Student discount:</b>	50%
(Full-time students only; copy of valid student ID must be enclosed with registration)	

### » One-day conference participation

<b>Early booking rate</b> (by 15 February 2013):	€390
Regular rate:	€480
(Please note that no speaker/poster presenter discount is available for one-day conference participation)	

### » Evening Event: Friday, 19 April 2013

Buffet dinner (drinks included)	
Community Centre „SAALBAU Bornheim“ (space limited)	€89

### » Passive House Excursion: Sunday, 21 April

Guided tour:	€95
(For conference participants only; space limited)	

**iPHA and iPHA Affiliate members receive a 10% discount on all prices listed above.**

### » Passive House Basics Course, Wednesday, 17 April, 9am - 5pm

Regular rate:	€400
Conference participants rate:	€300
iPHA and iPHA Affiliate member discount/Student discount:	50%

### » Passive House Components Workshop, Thursday, 18 April, 10:30am - 5pm

Conference participants rate:	€79
iPHA discount/Student discount:	50%

### » 5 Day iPHA Special (offer good through 15 February)

Includes the Passive House Basics Course | Passive House Components Workshop | International Passive House Conference | Evening Event | Passive House Excursion

**This special package is available to iPHA members only. €789**

» All prices include VAT

### » 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 both **registration and payment** are completed before **15 February 2013**. 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 before 15 March 2013 will incur a €70 processing fee. No refund will be granted for no-shows and cancellations made after 15 March 2013, but a substitute participant may be named.

### » 2. Services

The scope of services includes: The conference proceedings complete with conference presentations, lunch, coffee breaks and simultaneous translation into English at all German language sessions. The organisers reserve the right to make any necessary changes to the programme. Conference participants will receive a RMV-Kongressticket allowing them to use all public transportation within the City of Frankfurt (incl. Airport) from 18-21 April 2013.

### » 3. Cancellation, restriction of liability

In the event that the 17th Passive House Conference or any part of the framework programme must be cancelled, the participants will be notified immediately and will be reimbursed any participation fees already paid. The liability of the organisers is limited to reimbursement of the paid participation fee only.

### » 4. Conference scientific advisory board

Sabine Djahanschah, Osnabrück (Germany) | Wolfgang Feist, Innsbruck (Austria) | Esther Gollwitzer, Darmstadt (Germany) | Harald Halfpaap, Hanover (Germany) | Robert Hastings, Wallisellen (Switzerland) | Olivier Henz, Verviers (Belgium) | Björn Kierulf, Senec (Slovakia) | Helmut Krapfmeier, Dornbirn (Austria) | Simone Kreutzer, Växjö (Sweden) | Ljubomir Mišćević, Zagreb (Croatia) | Werner Neumann, Frankfurt (Germany) | Søren Pedersen, Næstved (Denmark) | Rainer Pfluger, Innsbruck (Austria) | Ludwig Rongen, Wassenberg (Germany) | Burkhard Schulze Darup, Nuremberg (Germany) | Rolf-Peter Strauß, Bremen (Germany) | Anke Unverzagt, Hanover (Germany) | Bernd Utesch, Frankfurt (Germany) | Etienne Vekemans, Paris (France) | Estelle Wüsten, Frankfurt (Germany) | Mark Zimmermann, Dübendorf (Switzerland)

### » Excursions

On Sunday, 21 April 2013, participants are welcome to attend one of the tours to visit Passive House buildings, both new builds and refurbishments. All tours include transfer, on-site tours, translation into English and lunch. Bookings possible for Conference participants only.  
**Meeting point: Messe Frankfurt**, Congress Center, Entrance Ludwig-Erhard-Anlage. Unless otherwise stated, all tours end at the Frankfurt Main Station. (space limited)

#### TOUR 1 | Non-residential buildings in brief | 9am - 3.00pm

School cafeteria (new build) | Kindergarten (new build) | School under construction (retrofit/new build)

#### TOUR 2 | Frankfurt city centre in brief | 9am - 2.30pm

Exhibition of Passive House build-ups | Residence and office building (new build) | Apartment building (retrofit)

#### TOUR 3 | Frankfurt – Riedberg | 9am - 3.30pm

Gymnasium (new build) | Apartment building (new build) | 16,000m<sup>2</sup> School campus (new build)

#### TOUR 4 | Large Passive House buildings | 9am - 5.00pm

27,000m<sup>2</sup> office and research building complex under construction (new build) | 16,000m<sup>2</sup> School campus (new build) | office building (new build)

#### TOUR 5 | City centre living | 9am - 3.30pm

Social housing block (new build) | Apartment building (retrofit) | Single family home (new build) | terraced houses (new build)

#### TOUR 6 | Urban planning challenge | 9am - 4.30pm

Apartment building (retrofit) | 7,000m<sup>2</sup> school campus and day care (new build) | terraced houses (new build) | Single family home (new build)

#### TOUR 7 | Frankfurt non-residential buildings | 9am - 4.30pm

Fire station (new build) | School under construction (new build/retrofit) | 7,000m<sup>2</sup> school campus and day care (new build) | Office building (new build)

#### TOUR 8 | Darmstadt | 9am - 4.30pm

Office building (retrofit) | Residence and office building (new build/retrofit) | Apartment building under construction (new build) | terraced houses under construction (new build)

#### TOUR 9 | Heidelberg Bahnhof Passive House district | 8.30am - 5.00pm

Urban district with office and laboratory building | Townhouses | Student residence hall | Building supply store (all new build)

Those who would like to end this tour early may do so at 3:30pm at the Heidelberg Main Station



### » Cultural programme

Conference participants can attend the following tours free of charge. Email registration required prior to 7 April: tagung@passiv.de

**Saturday, 20 April 2013** | Frankfurts' highlights, both historical and modern | 7.30-9pm

**Sunday, 21 April 2013** | An architectural and urban planning journey through time | 10-12am

(Tours subject to change)

### » Exhibition

Passive House components provide maximum comfort with minimum energy costs in new builds and refurbishments alike. Whether you want insulation materials, windows or ventilation systems with heat recovery – leading manufacturers of Passive House components will be represented at the accompanying specialist exhibition. Here you will find first-class advice, information materials, illustrative models and experts happy to answer your questions. In parallel, a lecture series will provide visitors with additional Passive House insights.

Date:	Friday and Saturday, 19 and 20 April 2013
Venue:	Halle 5.0 Messe Frankfurt Ludwig-Erhard-Anlage Entrance 60327 Frankfurt am Main, Germany
Hours:	19 April 2013, 9.00am - 7.00pm 20 April 2013, 9.00am - 5.00pm

### » Exhibition 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 assurors
- Software, specialist literature, advanced training
- Renewables for Passive House

### » Target groups

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

### » To order an exhibitors info pack please contact:

Barbara Löbau | Passive House Institute  
Anichstr. 29/54, 6020 Innsbruck, Austria  
Tel.: +43 (0)512 570768  
Email: barbara.loebau@phi-ibk.at



Photo credits: Frontpage from left to right: Reihenhäuser, Rook Architekten © PHI | Ziehenschule, Marcus Schmitt Architekten BDA © Christoph Kraneburg | Waisenhaus, Verwaltungsgebäude, B&V Braun Volleth Architekten GmbH © PHI (all Buildings are situated in Frankfurt am Main)

# 17<sup>TH</sup> INTERNATIONAL PASSIVE HOUSE CONFERENCE 2013



## Programme of the Passive House Conference 2013

and Exhibition  
Congress Frankfurt | Frankfurt am Main

**Passive House Basics Course**  
Wednesday, 17 April 2013

**Passive House Components Workshop**  
Thursday, 18 April 2013

**Conference and Exhibition**  
Friday and Saturday, 19 and 20 April 2013

**Excursions**  
Sunday, 21 April 2013



- » **Online registration at [www.passivehouseconference.org](http://www.passivehouseconference.org)**
- » Registration form for **the 17th International Passive House Conference**, 19 and 20 April 2013

- » **Please check your participation status:**
- Early booking (registration and payment before 15 February 2013)
- iPHA and iPHA Affiliate member
- Speaker accepted by the scientific advisory board
- Student (copy of student ID enclosed)
- » **Please check your participation preferences:**
- Both** Friday and Saturday, 19 and 20 April 2013
- Friday, 19 April 2013 **only**
- Saturday, 20 April 2013 **only**

- » **Further offers:**
- 5 Day iPHA Special (offer good through 15 February 2013)
- Passive House Basics Course, Wednesday, 17 April 2013
- Passive House Components Workshop, Thursday, 18 April 2013
- Evening Event, Friday, 19 April 2013
- Passive House Excursion, Sunday, 21 April 2013\*

The participation fee: € \_\_\_\_\_ (invoice will be sent)

Family name, Given name: \_\_\_\_\_

Company/Organisation/Institution/Authority: \_\_\_\_\_

Street address: \_\_\_\_\_

City and postal code: \_\_\_\_\_

Phone/Fax: \_\_\_\_\_

Email: \_\_\_\_\_

► I hereby acknowledge and accept the terms and conditions as outlined in this pamphlet for the 17th Passive House Conference 2013 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 17th Passive House Conference and side events, to be held in Frankfurt am Main, Germany from 17 - 21 April 2013. I am aware that my registration is binding.

City, Date: \_\_\_\_\_

Signature: \_\_\_\_\_

### » Passive House – a solid foundation for the energy revolution

All too often, discussions about energy run more along the lines of “nuclear or coal”, thus bypassing potential sustainable solutions. The approach to today’s energy questions must instead focus on energy efficiency and renewables”. For such solutions, Passive House stands as the exemplary guiding concept.

Passive House presents a reliable, sustainable solution. Passive House buildings use 90% less energy for heating than current building stock (at 165 kWh/(m²a)), meaning that the small remaining energy demand can be covered economically by a wide variety of stable and sustainable solutions. Renewables, however, are characterised by low energy densities and thus require space, itself often precious and limited. A sustainable concept must have a strong basis: the Passive House.

### » Framework programme

#### Passive House Basics Course, Wednesday, 17 April 2013

This full-day course is ideal for both first time Conference participants and for all those wishing to refresh their Passive House knowledge. Passive House essentials will be covered by prominent Passive House experts, including Wolfgang Feist himself.

The adaptation of building components and their implementation to suit climatic conditions will be the main focus during this day, and a ten-minute frame has been set aside after each presentation to answer questions. Start this third decade of the Passive House Standard by letting Passive House Basics bring you up to speed.

Campus Nibelungenplatz  
Gebäude 1 | FB Architektur  
Nibelungenplatz 1  
60318 Frankfurt am Main



#### Passive House Components Workshop, Thursday, 18 April 2013

Over the last several years, Passive House has taken off worldwide, creating a growing and, as of yet, unmet demand for high performance, Certified Passive House Components. This workshop aims to narrow the gap by providing guidance on what it takes to develop Passive House Components suited to a wide variety of climatic conditions while informing designers and builders on the latest innovations and technologies. This interactive event will also serve as a global networking platform, encouraging cooperative efforts between manufacturers on cutting edge, certifiable components.

For programme details on this workshop, put on by the Passive House Institute in cooperation with the exhibitors of the Passive House component exhibition, please visit:

[www.passivehouseconference.org](http://www.passivehouseconference.org)

## PLENARY SESSION | Harmony Hall

- 9:15 Opening remarks: Lucia Puttrich, Minister of the Environment, Energy, Agriculture, and Consumer Protection for the State of Hesse | Olaf Cunitz, Mayor of the City of Frankfurt | Thomas Schäfer, Minister of Finance for the State of Hesse | Barbara Ettinger-Brinckmann, President of the Chamber of Architects and Urban Planners Hessen | Representative of the Chamber of Trades Rhein Main
- 10:00 Frank Junker | Experience from more than 1,500 Passive House apartments
- 10:45 Wolfgang Feist | Passive House efficiency makes the energy revolution affordable
- 11:15 Tour of exhibition | Hall 5

12:00 LUNCH

	Harmonie Hall   level C2	Illusion Hall   level C3	Fantasy Hall   level C3	Spektrum Hall   level C2
	Session I: Passive House Capital Frankfurt*	Session II: Global cooperation*	Session III: 3ENCULT (held in English)	Session IV: Results and Analysis (held in English)
13:00	Werner Neumann   Frankfurt am Main, Passive House Capital – how can the success story continue?	Thilo Cunz   Building Together (Build-Tog) - Europe-wide adaption of an apartment building design	Alexandra Troi   Solutions & tools for the conservation compatible energy retrofit of historic buildings	Anda Kursisa   Passive House Method for Industrial buildings
13:30	Harald Mathes, Wolfgang Hasper   Passive House for the Hesse State administration	M. Tribus, C. Holzner   A cost comparison of three built Passive House apartment building designs	Rainer Pfluger   Active overflow ventilation for refurbishment of school buildings	Mark Siddall, John Trinick   Bridging the Energy Performance Gap
14:00	Wiebke Fiebig, Peter Hufer   Energy retrofit of a Wilhelminian building with Passive House components	Michael Klinski   The Norwegian Passive House experience	Ann-Marie Fallon, Joseph Little   Retrofitting Ireland’s first EnerPHit house – issues, challenges, solutions	Jelle Langmans   Quantitative study on the hygric response of timber frame walls with exterior air barriers
14:30	Winfried Naß   Passive House hospitals – a challenge Frankfurt is pleased to tackle	Yoon-Boum Cho   International cooperation between Korea and Germany continues	Frances Bradshaw   Detailing for Passivhaus retrofit in London; terrace houses, solid walls, timber floors and internal insulation	Elisabeth Sibille   Optimization of dwelling floor-plan configuration for cascade ventilation
15:00	1) Buth: Heppenheim administrative centre. Germany’s first Passive House administrative building born of the PPP process	1) Engelmann: Energy concepts for floating buildings 2) Amirismakouei: Application of a particular wind catcher to reduce cooling energy requirement of residential buildings	1) Vanaga: Reaching the EnerPHit standard using a holistic approach	1) Amwyl: Life Cycle Assessment results of PH buildings with different construction methods 2) Ochs: Energetic and Economic Optimization of the Renewable Energy Yield of Multi-Storey PHs
15:10	COFFEE BREAK	Session V: future-proof renovation*	Session VI: Energy-efficient building services*	Session VII: Passive House Regions (held in English)
15:45	Sebastian Herkel   Renovating a high-rise to the Passive House Standard – a year of operational experience	Kristin Bräunlich   Ventilation in commercial kitchens	Marianne Fujara   PassREG – Supporting of politicians to decide for Passive House with Renewable Energy	Paola Leardini   Building Passive Houses in subtropical climates? A lesson learnt from New Zealand
16:15	Florian Lichtblau   Retrofit of a timbered 1958 multi-story residential complex	Oliver Kah   Energy efficiency in cafeterias and commercial kitchens	Zdravko Genchev   Passive House Regions: A Guide to Success	Georg W. Reinberg   First Certified Passive House in Estonia
16:45	Marc Großklos   Results from the retrofit of seven multi-family units to the Passive House Standard	Tjado Voß   Distributed ventilation: Factors that influence energy demand and summer room temperatures	Carmelo Sapienza   Smart NZEB Passive House in Sicily	László Szekér   Passive Houses in Hungary
17:15	Barbara Wörndle   Taylor-made solutions for a historical residential building in the center of Bolzano (I)	Jan Riha   Highly diffusive overhead lights – heat loss versus energy conservation	Anne-Laure Maerckx   Aeropolis II & Elia: Passive buildings showing the (r)evolution of eco-construction in Brussels	João Marcelino   Passive House in Portugal: encouraging its spread in South West Europe
17:45	Kristin Bräunlich   Measuring moisture buildup in timbered beam ends for renovation with interior insulation	Matthias Werner   Influence of retrofitting on daylighting	Lorenzo Pagliano   Methodology for design, evaluation and monitoring of zero energy buildings in Mediterranean climate	Ling Guo   Current Development of Passive Houses in China
18:15	1) Böhme: Life in a renovated PH watermill 2) Rongen: The Heinsberg Protestant church – renovation, conversion, and expansion to the EnerPHit Standard (with interior insulation) 3) Bastian: Factors that influence the energy balance and affordability of non-residential EnerPHit projects	1) Großklos: Testing new air quality controls with VOC sensors for residential ventilation systems 2) Struckmeier: PH heating with waste heat from computers („server heater“)	1) Di Pietrantonio: Successful Passive House skyscrapers 2) O’Donnell: A very Irish Solution	1) Redon: Lean PH: the key to affordable performance 2) Kim: A Study on Building Energy Consumption of the First Passive House in Korea
20:00	Evening Event (reservation must be made in advance)		* Session held in German with translation into English	

POSTER CONTRIBUTION

POSTER CONTRIBUTION

## PLENARY SESSION | Harmony Hall

- 8:45 Opening remark: Gordon Sutherland, Intelligent Energy Europe (IEE) Senior Project Officer for Energy efficiency in buildings, industry, equipment and transport | Towards nearly zero-energy buildings: the European path till 2020
- 9:15 James Scott Brew | Reinventing Fire: Passivhaus role in bold solutions to get one nation off coal and oil by 2050
- 9:45 Helmut Krapmeier | Austrian State Prize Architecture and Sustainability

	Harmonie Hall   level C2	Illusion Hall   level C3	Fantasy Hall   level C3	Spektrum Hall   level C2
	Session IX: Planning and implementation*	Session X: Sustainable solutions for multistory apartment complexes*	Session XI: Hot and Humid Climates (held in English)	Session XII: Residential and non-residential Passive House buildings (held in English)
10:30	Ralf Bernich   Urban development with the Passive House Standard – Heidelberg’s new Bahnstadt district grows dynamically	Margrit Schaede   Multi-family Passive House units with energy gains	Jessica Grove-Smith   PHPP in hot and humid climates	Tomás O’Leary   Target to deliver 100,000m² Passive House Projects in New York City by 2017
11:00	Robert Persch   Quality management system for Heidelberg’s Bahnstadt Passive House district	Ludwig Rongen   The Geilenkirchen-Waurichen, Walderych 27 Passive House residential complex	Susanne Theumer   Mexico study: Passive Houses in tropical climates	Adam J. Cohen   Design & Construction of the Malcolm Rosenberg Center for Jewish Life
11:30	Burkhard Schulze Darup   DomRömer Frankfurt – a historical monument as a new build	Stefanie und Hans-Dieter Rook   Joint building ventures – getting more done together	Andreas Gruner   Towards sustainable housing in Mexico	Sebastian Moreno-Vacca   Passivhaus + Breeam with green lease at no extra cost. A myth?
12:00	Norbert Stärz   Mainzeile apartment building: planning in a challenging field – quality, costs, Passive House	Klaus Zeller   Multi-storey apartment complexes with single-shell brick walls – 17 units in Cologne	Clare Parry   Multi-use Passive House buildings in humid & hot climates: Jakarta	Hannes Mahlknacht   User habits – impact on energy consumption in Passive Houses
12:30	1) Krause: Combining a balance-based approach for Passive House planning with simple dynamic building simulation 2) Vallentin: Training towards the Certified Passive House Designer qualification in a Passive House design office	1) Tribus: How basement insulation can influence to the overall heating energy expenses in a small condominium	1) White: A Proposed Method for Peak Cooling and Dehumidification Load Calculation for PHs in Humid Climates 2) Gilliland: Case Study: PH Design produces First Certified Net Zero Energy Home in California 3) Reddy: Performance evaluation of solar insulation materials in UAE conditions	1) Rossi: Zero energy cooperative building in North Italy 2) Langenkamp: Challenging the possibilities
12:45	LUNCH	Session XIII: success in non-residential construction*	Session XIV: Sustainability*	Session XV: Retrofit: Validation of the Potential (held in English)
14:15	Harald Krause   Passive House schools in the City of Offenbach	Gernot Vallentin   Holistically sustainable building concepts – a plus for the Passive House	Lars Ørtoft   A Large Energy Efficient Renovation to Passive House	Virginie Leclercq, Pierre Willem   Brussels-Capital Action Plan for NZEB + Evolution and feedback through “Exemplary Building”
14:45	Bärbel Steinmann   Day care centres – building services in timbered and solid construction	Benjamin Krick   Nearly Zero Energy Building? The Passive House provides an answer	Kristen Simmons   Catbird House: the EnerPHit refurbishment of a timber frame two-family in New England	Markku Hienonen   What public authorities can do to increase energy efficiency in new buildings
15:15	Søren Peper   Monitoring the Lünen indoor pool pilot project	Rainer Vallentin   Energy transition and energy sustainability: what the Passive House concept can do 2010-2060	Agris Kamenders   Post-occupancy evaluation of dormitory building with aim of EnerPHit renovation	Tadeja Kovačič   A Slovenian experience: the effects of Eco Fund grants for energy efficiency in buildings
15:45	Michael Hörner   The IWU building: modernization with Passive House components – concept, costs, and operational experience	Martin Bauer   Using Passive Houses to store non-electric energy in smart grids	Tobias Loga   TABULA – Residential Building Typologies in European Countries	Art McCormack   Groundbreaking Training for Passive House Tradespersons
16:15	1) Gollwitzer: A comparison of insulation apron solutions 2) Freundorfer: Windows of efficiency class pH A+: an important step towards zero-heating-energy homes?	1) Sornes: Energy efficient timber framed external walls: Energy and environmental assessment over the life cycle 2) Mišević: EU Project ECO-SANDWICH	1) Little: Managing moisture – the key to healthy internal wall insulation retrofits of solid walls	1) Zbasnik-Senegacnik: Seismic safety of Passive Houses founded on thermal insulation 2) Nikolov: Three approaches to the ground insulation in seismically hazardous regions 3) Silkworth: A Multi-Zone Manager for the PHPP
16:30	COFFEE BREAK	17:00 Wolfgang Feist   Energy concepts – the Passive House in comparison. Conferral of the Passive House Pioneer Award	18:00 End of conference	Subject to alterations
		* Session held in German with translation into English		

POSTER CONTRIBUTION

POSTER CONTRIBUTION