

Organisers of the 19th International Passive House Conference:



Under the patronage of:

**Sigmar Gabriel**

German Federal Minister for Economic Affairs and Energy



#### » Registration by post:

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

#### » Detailed information and online registration:

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

#### » 2014 Conference schedule

16 April 2015	Workshop: New in PHPP 9 & designPH
16 April 2015	Workshop Ventilation (EN)
16 April 2015	Windows Workshop (EN)
16 April 2015	Business case seminar (EN)
17-18 April 2015	19th International Passive House Conference and Exhibition, Leipzig
19 April 2015	Passive House Excursions

#### » Conference languages: German and English

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

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#### » Conference: Friday and Saturday, 17 and 18 April 2015

**Early booking rate** €560

(registration by 20 February 2015, payment before 27 February 2015)

**Regular rate** €690

**Speaker rate** €210

**Poster presenter rate** €380

(Only one speaker/poster presenter discount will be granted for each accepted oral and/or poster contribution)

**Student discount** 50%

(Full-time students only; copy of valid student ID must be enclosed with registration)

#### » One-day conference participation

**Early booking rate** €410

(registration by 20 February 2015, payment before 27 February 2015)

**Regular rate** €510

(Please note that no speaker/poster presenter discount is available for one-day conference participation)

#### » Evening event: Friday, 17 April, 7:00pm - 11:00pm

Evening event at the CCL for the conference participants and exhibitors with an exhibitor pass is included in the price €45

#### » Passive House excursion: Sunday, 19 April

**Guided tour** €95

(For conference participants only; limited space available)

iPHA member discount on prices listed above **10%**

#### » Compact course cost-effective Passive Houses

Wednesday, 15 April, 9:00am – 5:00pm

Special conditions | in German only

#### » New developments: PHPP 9 & designPH

Thursday, 16 April, 9:00am - 1:00pm

**Regular rate** €200

**Conference participant rate** €100

#### » Ventilation workshop

Thursday, 16 April, 1:30pm - 6:30pm

#### » Windows workshop

Thursday, 16 April, 1:30pm - 6:30pm

#### » Business case seminar

Thursday, 16 April, 2:00pm - 6:30pm

**Regular rate for each of the above events** €450

**Conference participant rate** €200

iPHA member/student discount for above sessions **30%**

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 the registration is made before 20 February and payment is completed before 27 February**, respectively. 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 2015 will incur a €70 processing fee while cancellations made as of 20 March 2015 will incur a fee equal to 50% of the total registration fees. The participation fee is to be paid in full in case of no-shows and cancellations as of or after 30 March 2015; a substitute participant may, however, be named.

#### » 2. Services

The scope of services includes: the conference proceedings complete with conference presentations, lunch, coffee breaks, participation in the Friday evening event and simultaneous translation into English at all German language sessions. Conference participants receive a free **public transport ticket (Fahrausweis)**, valid from 16 through 19 April 2015, allowing the use of all public transport within the city of Leipzig, its surroundings (Zone 110) and in the arrival and departure zone 162, 163 of Leipzig/Halle airport.

#### » 3. Cancellation, restriction of liability

In the event that the 19th 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.

Detailed information on the framework programme:

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

#### » Excursions

On Sunday, 19 April 2015, 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: Congress Center Leipzig CCL**

All excursions end at the Leipzig Central Station

#### Excursion 1 | Education | 9:00am - 5.30pm

(new build only)

Daycare facility, school, single family home, fire station

#### Excursion 2 | Public buildings | 9:00am - 4:00pm

(retrofit and new build)

Training center retrofit, daycare facility retrofit, school, fire station, school retrofit

#### Excursion 3 | City of Halle | 9:00am - 5.30pm

(new build only)

School, two single family homes

#### Excursion 4 | Learning and living | 9:00am - 3.30pm

School retrofit, two newly built schools, apartment building

#### Excursion 5 | Fire station and schools | 9:00am - 4.00pm

School, fire station, school retrofit

#### Excursion 6 | Health, Learning and Living | 9:00am - 2.30pm

School, semi-detached house, medical centre and spa retrofit

Please note that this programme is subject to change.

#### » Conference scientific advisory board

Roland Digel, Osnabrück (DE) | Wolfgang Feist, Innsbruck (AT) | Angelika Freifrau von Fritsch, Leipzig (DE) | Marianne Fajara, Darmstadt (DE) | Harald Halfpaap, Hannover (DE) | Robert Hastings, Wallisellen (CH) | Olivier Henz, Verviers (BE) | Bjorn Kierulf, Senec (SK) | Helmut Krapmeier, Dornbirn (AT) | Raimund Krell, Leipzig (DE) | Simone Kreutzer, Växjö (SE) | Benjamin Krick, Darmstadt (DE) | Dirk Möbers, Wuppertal (DE) | Søren Pedersen, Næstved (DK) | Rainer Pfluger, Innsbruck (AT) | Olaf Reiter, Dresden (DE) | Ludwig Rongen, Wassenberg (DE) | Jan Steiger, Darmstadt (DE) | Rolf-Peter Strauß, Bremen (DE) | Anke Unverzagt, Hannover (DE) | Marcus van Reimersdahl, Dresden (DE) | Etienne Vekemans, Paris (FR) | Mark Zimmermann, Dübendorf (CH)

#### » Exhibition

Passive House components provide maximum comfort with low energy costs in new builds and refurbishments alike. Whether you want 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, a range of solutions to supply your Passive House ecologically with renewable energies and experts happy to answer your questions. In parallel, a lecture series will provide visitors with additional Passive House insights.

Date: Friday and Saturday, 17 and 18 April 2015

Venue: Congress Center Leipzig

Seehausener-Allee 1

04356 Leipzig, Germany

Time table: 17 April 2015, 9:00am - 7:00pm

18 April 2015, 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 assurors
- Software, specialist literature, advanced training
- Renewables for Passive House buildings

#### » Target groups

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

#### » To order an information pack for exhibitors please contact:

Barbara Löbau | Passive House Institute  
Anichstr. 29/54, 6020 Innsbruck, Austria

Tel.: +43 (0)512 570768

Email: [barbara.loebau@phi-ibk.at](mailto:barbara.loebau@phi-ibk.at)



# 19<sup>TH</sup> INTERNATIONAL PASSIVE HOUSE CONFERENCE 2015

and Exhibition



## Congress Center Leipzig Germany

17 – 18 April 2015

Framework programme 16 – 19 April 2015

## Programme



## REGISTRATION

- » Register online at [www.passivehouseconference.org](http://www.passivehouseconference.org)
- » Paper registration form below

- Early booking (registration by 20 Feb 2015, payment before 27 Feb 2015)
- iPHA member
- Speaker accepted by the scientific advisory board
- Student (copy of student ID enclosed)

- Both Friday and Saturday, 17 and 18 April 2015
- Friday, 17 April 2015 only
- Saturday, 18 April 2015 only

- » Framework programme:
- New developments PHPP 9 & designPH, Thursday, 16 April 2015
- Ventilation workshop, Thursday, 16 April 2015
- Windows workshop, Thursday, 16 April 2015
- Business case seminar, Thursday, 16 April 2015
- Evening event, Friday, 17 April 2015 (Included in registration price for conference participants)
- Passive House excursion, Sunday, 19 April 2015\*  
\*(Only for registered participants of the conference)

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 flyer for the 19th Passive House Conference 2015 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 19th Passive House Conference and side events, to be held in Leipzig, Germany from 17 - 18 April 2015. I am aware that my registration is binding.

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

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

## WORKSHOP PROGRAMME

### PHPP 9 & designPH [EN], Thursday, 16 April, 9:00am - 1:00pm

New developments of the Passive House design software.

### Windows Workshop [EN], Thursday, 16 April, 1:30pm - 6:30pm

The worldwide market for highly efficient, cost effective windows is outpacing the spread of the knowledge needed to manufacture them, resulting in a frustrating bottle neck. This workshop, put on by Benjamin Krick of the Passive House Institute and Franz Freundorfer of pro Passivhausfenster, will help to ease that bottle neck by providing window manufacturers, designers, and other interested parties with expert knowledge on high performance windows.

### Ventilation Workshop [EN], Thursday, 16 April, 1:30pm - 6:30pm

In this workshop, cost effective ventilation concepts, including new ideas for air distribution, will be introduced and discussed. Especially in the case of centralized ventilation systems where fire and noise protection requirements must be met, cost effectiveness can become a challenge. This workshop will explore these aspects and also look into decentralised systems, where the use of prefabricated elements can result in simplified installation and general cost savings. This informative workshop will also serve as an opportunity for the exchange of practical experience.

### Business case seminar [EN], Thursday, 16 April, 2:00pm - 6:30pm

This seminar, supported by the EU-funded EuroPHit project and put on by the Passive House Institute, explores the business case for Passive House concepts and components. The half-day event will provide insight into the economics of building energy efficiency and high performance building components, as well using the PHPP to compare the business cases for design variants. The basics of economic feasibility calculations and boundary conditions will be explained as will the influence of funding programmes.

[www.europhit.eu](http://www.europhit.eu)

Venue: Congress Center Leipzig CCL  
Seehausener-Allee 1 | 04356 Leipzig, Germany

For programme details on these workshops, please visit:  
[www.passivehouseconference.org](http://www.passivehouseconference.org)

**2015 Component Award Ceremony**  
**Friday, 17 April 2015**  
**Passive House Conference Plenary Session**



## FRIDAY PROGRAMME | 17 APRIL 2015

### PLENARY SESSION | Hall 1

9:00 Opening remarks | Burkhard Jung, Lord Mayor of the City of Leipzig (tbc) | Ruairi O'Brien, board member of the Saxony Chamber of Architects | President of the Saxony Chamber of Engineers  
9:25 Passive House and EU Support: Past, Present, Future | Philippe Moseley (EASME)

#### Hall: 1

[!] Session I: NZEB and the economics of Passive House  
13:00 Elisabeth Sibille | How energy-conscious planning lowers construction costs  
P: Siegfried Schlott | The overall energy values of a Passive House building  
Britta Stein | National approaches to Nearly Zero-Energy Buildings in Europe  
Annette Bähr | Optimizing the lifecycle costs of day care centers – the potential of standardization in planning and construction  
P: Martina Riel | Economic feasibility study of a renovated office complex  
P: Nataša Teraž | Passive House can be affordable: Optimization through development  
Ingo Höfle | Affordable Passive House production facilities

#### 15:30 COFFEE BREAK

Session V: Components: Building envelope

16:00 Franz Freundorfer | Windows of efficiency class phA+ – a further step toward cost efficient PH  
Aleš Ugovšek | Thermally modified wood – applicable material for passive windows – theory and practice  
P: Günter Schlagowski | The production of Passive House Standard windows in a Passive House certified production hall  
P: Michael Stegemann | Better insulation with optimized masonry consoles  
Andreas Rudolph | Safety and usability of certified Passive House post-and-beam designs  
Frank Hülsmeier | Resource-optimized, slender sandwich façades  
P: Oliver Ottinger | Heat losses through chimney systems in Passive House buildings  
Johannes Foppe | The EMS+SI element assembly system – the easy way to install windows and doors in the insulation level  
P: Mirko Schüren | The soil as part of the building envelope: The U-values and PSI values of building components touching the ground  
Andreas Naumann | Timbered Passive House, the 3 G+ construction system from single-family homes to timbered complexes  
P: Alan Clarke | Heat loss via internal drainage vent pipes

[!] Introduction for **session I** in "Business case seminar", see Framework Programme

#### Hall: 2

Session II: Building services  
Norbert Stärz | Dimensioning the heat-generator for single-family homes and apartment complexes  
Alexander Pröh | Should apartment complexes have central ventilation systems or a unit in each apartment?  
Peter Schwerdtfeger | Optimizing airflow in non-residential buildings – a case study of kindergartens  
Gabriel Rojas | Comfort and affordability with air heating – a comparison of radiators and floor heaters  
Oliver Kah | Lowering costs with central residential ventilation systems  
Oliver Ottinger | The cost-saving potential of water heating systems for drinking water: supply, distribution, and use

#### Hall: 3

Session III: Leipzig and Saxony  
Bernd Wolters | Implementing the Passive House Standard in the Free State of Saxony  
Dorothee Dubrau | What the City of Leipzig is doing  
Thomas Eaton, Mathias Krumbiegel, Jörg Haupt | Planning a Passive House sports high school  
Jörg Königsdorff | Thermal energy studies in classrooms, air quality, and thermal comfort  
Andreas Hofmann | Technical monitoring  
Irmela von Nordheim | Social monitoring  
Olaf Reiter, Frank Hawemann | Day-care centre "Zauberhaus" in Delitzsch by Leipzig

Session VII: EnerPHit: Innovative retrofitting concepts

Michael Tribus | Step-by-step refurbishment of a school and residence hall in use  
Harald Malzer, Rainer Pfluger | The first certified EnerPHit office high-rise – modernizing with Passive House components  
Reimar von Meding | Vellige Veste – the first Passive House office complex retrofit in the Netherlands  
Karl Höfler | Innovative retrofits towards Plus Energy buildings  
Oscar Stuffer | Deep energy retrofit of an architectural heritage building: an historic Villa on Lake Como  
Carl-Peter Goossen | A practical approach for an integrated refurbishment with a scrum team

P: Poster-Presentation

## FRIDAY PROGRAMME | 17 APRIL 2015

9:45 Passivhaus-Komponenten: Schlüssel zur Energiewende | Wolfgang Feist  
10:30 Results from the European Passive House Projects | Team of the Passive House Institute  
11:00 Component Award Ceremony | Team of the Passive House Institute  
11:15 Group visit to the exhibition | 12:00 LUNCH BREAK

#### Hall: 4

Session IV: EuroPHit: Components for Refurbishing  
Benjamin Krick et al. | Passive House windows: Comfortable, profitable, innovative, and future-proof COMPONENT AWARD  
Maia Guermanova, Gareth Roberts | A specialist sliding sash window for EnerPHit developments in UK  
Thomas Eaton, Mathias Krumbiegel, Jörg Haupt | Planning a Passive House sports high school  
Jörg Königsdorff | Thermal energy studies in classrooms, air quality, and thermal comfort  
Andreas Hofmann | Technical monitoring  
Irmela von Nordheim | Social monitoring  
Olaf Reiter, Frank Hawemann | Day-care centre "Zauberhaus" in Delitzsch by Leipzig  
Tanja Schulz | Recommendations for EnerPHit retrofits with interior insulation  
Isabel Sanchez | Building Integrated Photovoltaic (BIPV) in Step by Step Retrofitting projects  
P: Christoph Dekant | Newly certified: Passive House loft ladder

#### Hall: 5

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P: Alan Clarke | Heat loss via internal drainage vent pipes

Session VIII: China is catching up

Berthold Kaufmann | Xingfubao Passive House Building in Urumqi – lessons learnt  
Peter Ruge | Best Practice in Southern China – Passive House Bruck  
Dawid Michulec | Certified Passive House in China with planning and implementation done by Chinese firms  
Han Fei, Yu Zhengjie, Ludwig Rongen | Challenges of implementation of Passive House construction in the present stage in China  
P: Yao Yi | Passive house technology popularization and promotion in China  
Xu Wei | The application of high performance envelope in residential building in China  
Discussion with all the speakers

17:00 COFFEE BREAK

### PLENARY SESSION | Hall 1

17:15 Closing plenary session | Wolfgang Feist  
18:00 End of event

## SATURDAY PROGRAMME | 18 APRIL 2015

### PLENARY SESSION | Hall 1

9:00 Opening remarks by | Wolfgang Feist  
9:15 Trans-European EnerPHit Case Studies Lead the Way | Tomas O'Leary  
9.45 Classic, plus, premium: The new Passive House classes and how they can be reached | Benjamin Krick

#### Hall: 1

Session IX: Building services engineering  
10:30 Jürgen Schnieders | Active cooling in Passive House – strategies for active cooling systems  
Matthias Laidig | How well does a compact device with fresh air heating work in practice? Measurement results  
Elisabeth Sibille | The use of active overflow systems for distributing fresh air in apartments  
Bjorn Kierulf | Advantages of a wall integrated centralised ventilation unit  
Dietmar Siegele | Critical analysis of solar domestic hot water and solar space heating algorithms in PHPP  
Allen Gilliland | Asynchronous Air Circulation for Simplified Ventilation and Space Conditioning

Session XIII: The path towards Nearly Zero-Energy Buildings

Marc Großklos | Passive House with surplus energy or Efficiency House Plus? Paths towards surplus energy  
Christoph Hensel | A comparison of the Passive House concept and the Solar House with a further development towards Plus Energy House  
Rainer Tepe | Solar-wood heating concepts for Passive House  
Helmut Schöberl | Austria's largest Plus Energy office complex at Getreidemarkt, TU Vienna  
Boris A. Nikolaev | Passive House and active buildings will be constructed in Russia!  
P: Joseph Thurrott | Meeting the heating energy demand using a local, renewable, inexpensive fuel: wood logs  
P: Shane Colclough | Seasonal Thermal Energy Storage and Passive House – lessons from five years of monitoring

17:00 COFFEE BREAK

### PLENARY SESSION | Hall 1

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Session XIII: The path towards Nearly Zero-Energy Buildings

Lars Beckmannshagen, Jan Gerbitz | Passive House as a cornerstone of energy-efficient urban districts  
Dietrich Schwarz | The Neugrüen Mellingen neighborhood, Minergie-A-Eco and -P-Eco  
Matthias Wohlfahrt | Zero-emissions strategy for a neighborhood built in the 50s and 60s  
P: Friedemann Stelzer | Wilhelminian Style Building in the EnerPHit-Standard With Renewable Raw Materials  
P: Bernd Retz | Franco-German cooperation in passive House planning  
P: Saed Raji | Comparative analysis between the PHI standard and current French efficiency regulations  
P: Etienne Vekemans | French energy efficiency regulations compared to PHPP  
Harald Halfpaap | Panel discussion

17:00 COFFEE BREAK

### PLENARY SESSION | Hall 1

17:15 Closing plenary session | Wolfgang Feist  
18:00 End of event

#### Hall: 2

Session X: Non-residential Passive House buildings  
Werner Hässig, Sara Wyss | Optimization of thermal bridges in buildings subject to earthquake loads  
Michael Keller, Steven Kellner | Multistory Passive House office complexes  
Jan Tywniak | Education and office complex of the Partnerstvi Foundation in Brünn  
Stefan Plesser | Evaluation of eight Passive House day care centers in Hanover  
P: Ronny Erfurt, Karsten Sommer | A Passive House school in Freiberg, Saxony  
P: Olaf Reiter, Carla Groß | User manual for Passive House schools  
Dietmar Herklotz | Experience as a Passive House auditor

Session XIV: PassREG – Passive House neighborhoods

Micheel Wassoof | Comfort and Passive House in the Mediterranean summer – monitoring of two detached homes in Spain  
Silvia Prieto | Several examples of monitored Passive House homes from the Mediterranean to the Pyrenees  
Wolfgang Berger, Bernd Nitsch | An EnerPHit retrofit of an apartment in a complex in Bilbao, Spain  
Tugba Salman Gurcan | Cost-effective retrofitting in Turkey by adapting EnerPHit standards to a warmer climate  
P: Romeu Vicente | Thermal Comfort Analysis of LSF Passive House Dwellings for Southern European Climates  
P: Romeu Vicente | Overheating and Optimization of Indoor Thermal Comfort of Passive House Buildings in Warm Climates  
P: Zedillo Velasco | Systems for the evaluation of energy & environmental efficiency of housing in Mexico  
Timur Kolsuz, Helen Bergstrom, Sam Zeif | Techstyle Haus a passive house prototype in lightweight construction

17:00 COFFEE BREAK

### PLENARY SESSION | Hall 1

17:15 Closing plenary session | Wolfgang Feist  
18:00 End of event

Programme is subject to change