

18TH INTERNATIONAL PASSIVE HOUSE CONFERENCE 2014



Passive House Conference 2014
and Exhibition

Eurogress Aachen | Germany
25 and 26 April 2014

Framework programme 23 – 27 April 2014

Programme

PLENARY SESSION | Europa Hall

- 9:00 Opening remarks: Gisela Nacken, Head of Planning and Environment of the City of Aachen | Lothar Schneider, Director of the EnergyAgency.NRW
- 9:15 Heinrich Bottermann, General Secretary of the DBU foundation | The Passive House – an established construction standard on the way to energy revolution
- 9:30 Diana Ürge-Vorsatz, Director of the Center for Climate Change and Sustainable Energy Policy (3 CSEP), Central European University | Energy efficient buildings – an important opportunity to mitigate climate change
- 10:15 Wolfgang Feist | Passive House is more...
- 10:45 **2014 Passive House Award Ceremony**
Greeting | Dr. Heidrich, Department Head, German Federal Ministry for Economic Affairs and Energy
- 11:15 Johannes Rimmel, Minister for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection of North Rhine-Westphalia
Tour of exhibition | lunch

Europa Hall	Brüssel Hall	Berlin 1 Hall	Berlin 2 Hall
Session I: PH on the regional level*	Session II: Ventilation*	Session III: Retrofit	Session IV: Day-care centres / schools*
13:00 Ulrike Leidinger, Eckhard Wendel The City of Aachen – on the way to Passive House	Rolf-Peter Strauss Ventilation – simple and elegant!	Witta Ebel, Berthold Kaufmann Economy and financing of efficiency: new buildings and renovations	Kai Künzel »KlimaKita« in three weeks An affordable retrofit for a Passive House day care centre
13:25 Hartmut Murschall Energy efficiency in North Rhine-Westphalia: political commitment and support	Bernhard Martin A new ventilation concept for small dwelling units	Peter Keig Analysis of the operational energy performance of a retrofitted solid wall terraced house versus designed performance	Robert Heinicke The "House by the lake"
13:50 Matthias Linder The City of Frankfurt: 10 years of experience with public Passive House buildings	G. Rojas-Kopeinig Cascade ventilation – air exchange efficiency in living rooms without separate supply air inlets and exhaust air outlets	Herwin Sap A concept for quick and clean Passive House renovation for mass housing in the Netherlands	Patrick Ostrop Passive House school and educational center "Tor zur Welt" in Hamburg
14:15 Michael Stephan Tradesperson and designer network in the Aachen region	Rainer Pfluger Heatpipes for frost protection in PH ventilation systems	Alexandra Troi Energy efficiency of windows in historic buildings	Helmut Heuer Certification and architectural quality – a contradiction?
14:40 I. Klawitter, J. Probst Energy concept and sustainable design in Belgium's German community	Rainer Lautner Highly efficient ventilation systems with rotation heat exchanger für Passive House buildings	Harry Paticas Monitoring building fabric moisture in a historic house retrofitted with internal insulation	Joachim Götsche Science College Overbach: Passive House school in Jülich-Barmen
15:05 Markus Lehmenkühler, Peter Fischer E-View – an online monitoring system not only for public administrative bodies	1) Schmidt The new generation of enthalpy exchangers – performance and energy efficiency 2) Brandmeier Outdoor installation and special characteristics of ventilation systems 3) Sibille Development of a coaxial-duct as outdoor air inlet and exhaust air outlet for ventilation units 4) Woollett Rotary heat exchanger: practical experience	1) O'Leary Ten Trans-European EuroPHit projects lead the next wave of Passive House promotion 2) Pedersen Online platform for systematic Passive House certification	Martin Endhardt Passive House day-care centre with class rooms in prefabricated concrete construction
15:30 COFFEE BREAK			
Session V: Components: building envelope*	Session VI: PH design tools*	Session VII: Climatic challenges	Session VIII: EnerPHit refurbishment*
16:00 Benjamin Krick PHI window certification: cold and arctic climates	Gernot Vallentin Design principles for Passive House buildings: illustration of completed day-care centres	Fabio Ferrario The first certified Passivhaus hotel in Italy	Ludwig Rongen Heinsberg Protestant Christ Church – EnerPHit refurbishment, conversion and extension
16:25 Günter Pazen Passive House windows are cost-effective!	Zeno Bastian Variant calculations and economic assessment with PHPP 9	Rena Vallentin Seminar and youth guest-house – a flagship project in Korea	Stefan Oehler Conversion of a trading post into a multi-family building with lofts
16:50 Patrick Ziegler-Herboldt Presentation of certified curtain wall substructure components & experiences	Pia Regner Simulation and construction of cost-effective Passive House schools with minimised mechanical systems	Thomas Greindl An ecological, sustainable Passive House 300 km south of the Arctic Circle	Georg Reinberg Passive House refurbishment with extension and redensification under challenging conditions
17:15 Klaus Zeller Two residential building projects with monolithic masonry walls in Cologne	Alexandre Schütze Sensitivity analysis with PHPP	1) Mauring Winter performance of Certified Passive House building in Northern European cold climate 2) Krauklis Design, optimisation, construction and operation of a large single-family Passive House in Riga	Eva Anlauff Cultural heritage preservation award for an energy retrofit – prevention of structural damage, cost-effectiveness and regulatory compliance
17:40 1) Muskatewitz Challenging connection details and their impact on the heating demand 2) Kethorn Durable airtightness of joints between windows and walls 3) Gollwitzer Optimisation of roller shutters and exterior blinds 4) Park Comparative evaluation of EIFS using VIPs for better performance 5) Andreau Electronically tintable glass: greater design freedom without compromise	1) Nordhoff eolearn – Passive House experts at your fingertips 2) Hasper Advance! Education!	3) Szalavicz Can Passivhaus Standards be adapted to high-rise residential buildings in South Africa? 4) Marcelino The performance of the first Passive Houses in Portugal: the path to sustainability 5) Rosemeier Is mechanical ventilation dispensable in temperate climates? 6) Vicente/Rodrigues Passivhaus economic feasibility for Portuguese climate	Oliver Ottinger Comparison of four interior insulation systems – measurements and hygrothermal simulations 1) Reinke From a traditional Hamburg detached house to a low-energy house with a Passive House extension 2) Graf EnerPHit – an early pilot project 3) Rongen Passive House refurbishment of Baesweiler's secondary school – monitoring and user survey
18:15	End of event 20:00 Evening event (reservation must be made in advance)		



Organisers of the 18th International Passive House Conference:



EnergieAgentur.NRW



Under the patronage of:

Johannes Remmel

Ministry for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection of the German State of North Rhine-Westphalia

Ministerium für Klimaschutz, Umwelt, Landwirtschaft, Natur- und Verbraucherschutz des Landes Nordrhein-Westfalen



» **Registration by post:**

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

» **Online registration:** www.passivehouseconference.org

» **2014 Conference schedule**

- 23 April 2014 Passive House Basics Course
- 23 April 2014 Passive House Windows Workshop
- 24 April 2014 Passive House Components Workshop
- 25-26 April 2014 18th International Passive House Conference and Exhibition, Eurogress Aachen
- 27 April 2014 Passive House Excursions

» **Conference languages: German and English**

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

Supported by:



PLENARY SESSION | Europa Hall

9:00 Vincent Berrutto | Head of Unit for Energy Efficiency, European Commission - Executive Agency for Competitiveness & Innovation (EACI) (tbc)
9:15 Pat Cox | „German know how - Irish can do“: A sustainable enterprise and innovation cluster
9:45 Grégoire Clerfayt | 2015 – Brussels goes passive – from stimulation to regulation

	Europa Hall	Brüssel Hall	Berlin 1 Hall	Berlin 2 Hall
	Session IX: Swimming pools, hospitals, super markets*	Session X: PH and renewables = NZEB*	Session XI: North America	Session XII: Passive House regions
10:30	Jörn Kaluza Improving the electricity efficiency of indoor swimming pools	Manfred Huber Field report: Nearly-zero energy multi-family building with load management	Adam Cohen Built comparison of a Passive House and a standard American dormitory – a twin study	U. Scherer, M. Wohlfahrt Promoting efficient building: The PassReg principle in the Hanover Region
10:55	Jessica Grove-Smith Energy efficiency in Passive House swimming pools: demand and consumption of the "Lippe" bath	Christoph Deimel Contemporary design in Berlin: From Passive House to Plus energy buildings	Timothy McDonald Strategies for affordable, modular and multifamily PH housing in the USA	Paola Leardini How do Passive Houses perform in New Zealand? From simulation to facts
11:20	Oliver Kah Baseline study – implementing the Passive House concept in hospitals	Ralph Wortmann Passive and zero-emission refurbishments	Adam Cohen Design & construction of the LDS Dental Clinic	Mark Siddall Occupant satisfaction in UK Passivhaus dwellings
11:45	Kristin Bränlich Aspects of efficient ventilation in hospitals	Edith Varga Evaluation of a Passive House settlement according to DGNB criteria	Jörg Rügemeier Maximizing the Passive House at market rate – Utah's most energy-efficient and cost-effective house	Ruut Peuhkuri Indoor environment in 126 Danish Passive House apartments heated by ventilation air
12:10	L. Lepp, J. Schnieders Passive House super markets on the rise: requirements, examples and results	Christian von Ballmoos Palazzo Positivo – refurbishment of a multi-family building in Chiasso to plus energy level with BIPV	Malcom Isaacs Passive House economics: A simplified North American approach	Ljubomir Mišćević The first twenty Passive Houses in Croatia
12:35	Steafan Oehler Laboratory building of Mainz University's anthropology department	1) Struckmeier Passive House: Computer data centres with a PUE below 1.2) Wamsler A construction group builds passive and „positive“ 3) Garg Design of a cost effective net Zero Home for Ahmedabad. India 4) Yeats Lancaster Cohousing. 41 Passive Houses with on-site renewable energy distribution	Matthew O'Malia Design/ Build/ Refine/ Repeat: A systems approach for Passive House construction in North America	Clarence Rose, Dragomir Tzanev Set of Solutions & lessons from the new Passive House regions 1) Pietrobon Mediterranean Passive House solutions towards nearly zero energy buildings in Italian regions
13:00	LUNCH			
	Session XIII: Living: examples and mechanical systems*	Session XIV: Experiences: integrated design and use*	Session XV: Tools and applications	Session XVI: EnerPHit: Passive House Retrofit
14:30	Martin Treberspurg Passive House residential complex in Vienna's Kaiser-mühlenstraße	Astrid Müller Energy concept Aachen Richtericher Dell	H. Malzer, D. Edwards designPH – 3D Passive House design tool	Zeno Bastian International EnerPHit-certification criteria
14:55	Michael Müller Passive House dormitory	Peter Lückeraht Interface management in Passive House buildings	Georgios Dermentzis Heat pumps in Passive Houses – PHPP application	1) Butcher, Herring EnerPHit barn conversion: achieving high thermal performance & structural stability 2) Sevela Energy refurbishment of heritage buildings with PHPP's and real measurements' feedback 3) Janetti Internal insulation applied to a listed school building: in situ measurements and numerical analysis 4) Hrynyszyn Passive House – an option for a modern roibu? 5) Jacobs High performance insulation: technology innovation and tailoring for replication 6) Egea Barbosa Passivhaus Refurbishment in Mexico City
15:20	Peter Tappler Indoor air quality in energy efficient residential new builds	Ingo Höffle Integrated design and cost-effectiveness of Passive House office buildings	Maria del Carmen Rivero Adapting the PHPP to Mexican social housing: the challenges of creating the DEEVi tool	
15:45	Jürgen Schnieders Experience with a drain water heat recovery	Bernhard Frohn Balanced Office Building – BOB.Aachen: 10 years of building use	Nick Grant Internal heat gains	
16:10	Erwin Nolde Grey water recycling and heat recovery – a steppingstone from Passive House to zero-energy buildings?	1) Teizer Cost and pay-off comparison: Passive House office building and German legal requirements 2) Psyk Use of geothermal energy in a renovated office building 3) Jünemann Resident consulting – involving residents in the refurbishment process	1) Arnäutu PHPP interface certification 2) Vide Lutman Seismic Foundation Pillow 3) Dinis Alves Building with Passivhaus requirements: thermal bridge modelling and thermal influence	
16:35	1) Kraus Compact heat pump systems and drinking water regulations			
16:45	COFFEE BREAK			
			PLENARY SESSION Europa Hall	
			17:15 Wolfgang Feist Passive House – the next decade	
			18:00 End of conference	

Subject to alterations

* Session held in German with translation into English