



6th Active House Symposium  
7.-8. November 2018  
Lecco, Italy

[REGISTRATION](#)

# *Active House, the Architecture of Comfort & Economy*

- how to make it smart & specific? Learn from the best, and discuss with your peers

## **Context**

- ▶ How can the user aspects of sustainable buildings be defined, monitored and improved to the benefit of human well-being and environmental sustainability?
- ▶ Comfort parameters should be smart and specific, as well as energy efficient. We are today able to programme, simulate and perform realtime checks of the key features for users. Energy efficiency is a must, to be balanced with performance targets.
- ▶ At the 6<sup>th</sup> Active House Symposium, the topic of Comfort Economy will be demonstrated, exemplified and discussed by architects, engineers, investors, house builders and researchers.
- ▶ The programme formats are high level key notes, shorter pulse presentations and parallel workshops. Share of experience, data, tools and ideas on how to make buildings smart and specific. The audience is building professionals - architects, engineers, designers, developers, builders, producers and academics from several continents.



## 6th Active House Symposium

# *Active House, the Architecture of Comfort & Economy*

- how to make it smart & specific? Learn from the best, and discuss with your peers

### **Organisers**

- ▶ The 6<sup>th</sup> Active House symposium is organised by the Active House Alliance, in cooperation with Professor Marco Imperadori from Politecnico di Milano and his academic team.
- ▶ The symposium will be registered with 12 CFP (education points)

### **Sponsors**

- ▶ We kindly thank our sponsors, making the symposium possible:
  - ▶ Great Gulf Group
  - ▶ Knauf
  - ▶ Mitsubishi Electric Heating and Cooling
  - ▶ Renson
  - ▶ Somfy
  - ▶ Vanoncini
  - ▶ VELUX Italia

 **GREAT GULF**

**KNAUF**

 **MITSUBISHI  
ELECTRIC**

Heating and Cooling

 **RENSON®**

Creating healthy spaces

**somfy®**

 **VANONCINI** S P A  
CREIAMO EDILIZIA SOSTENIBILE

**VELUX®**





# Programme



## 6th Active House Symposium

# Active House, the Architecture of Comfort & Economy

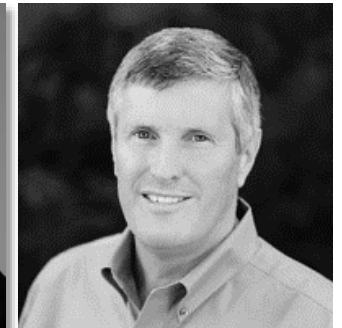
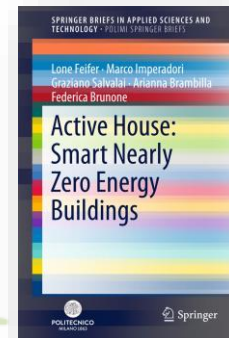
- programme in overview \*

### Wednesday November 7

- 12.00 Lunch
- 13.00 **Welcome** by Prof. Manuela Grecchi, Politecnico di Milano; Vice-rector at Lecco Campus
- 14.00 **Key note** by Ian Ritchie
- 15.00 5 pulse talks on projects, case examples;
- 17.00 **Key note** by Gord Cooke, Partner at Construction Inc., Canada
- 20.00 Symposium Dinner and label awards 2019 ceremony at restaurant in Lecco

### Thursday November 8

- 09.00 **Key note** by Chiara Tonelli - *Active House RhOME concept*
- 10.00 Book launch 'Active House - Smart Nearly Zero Energy Buildings'
- 11.00 Parallel workshop sessions
- 13.00 Lunch & tour of campus Lecco
- 14.00 Student prize ceremony 2019
- 14.30 **Key note** by Brian Cody - *Form Follows Energy*
- 16.00 Speakers panel, key take aways and next steps ahead
- 17.00 End of symposium
- 20.00 Dinner as part of the touristic programme



\* Programme, speakers and timings may be subject to changes

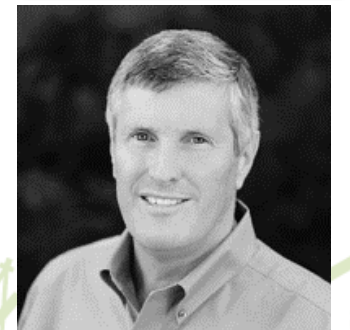


## 6th Active House Symposium DAY 1

# Active House, the Architecture of Comfort & Economy

- Wednesday November 7\*

- ▶ 12.00 Registration and lunch buffet
- ▶ 13.00 Welcome by Prof. **Manuela Grecchi**, Vice-rector Politecnico di Milano
- ▶ 13.15 Introduction by **Marco Imperadori** & Lone Feifer
- ▶ 13.30 Key note by **Ian Ritchie**, UK  
<http://www.ianritchiearchitects.co.uk/>
- ▶ 14.30 Pulse talks on projects, case examples and results
  - ▶ **Marco Imperadori** & **Vinay Venkatramen**; *Active House Live*
  - ▶ **Elisabeth Endres**: *Aktiv+ - Strategies for buildings at the interface of passive and active*
  - ▶ **SUN Yimin**; **Active House Academic Society**: *Wuhan University active Stadium*
  - ▶ **Eileen Meyer**: *Strawbale B&B active barn recovery*
  - ▶ **Istvan Kistelegdi**: *Aerodynamical winery & active boutique hotel*
- ▶ 17.00 Key note by **Gord Cooke**, Canada  
<https://constructioninstruction.com/gord-cooke/>
- ▶ 20.00 **Symposium Dinner** and label awards 2019 ceremony



\* Programme, speakers and timings may be subject to changes



## 6th Active House Symposium DAY 2

# Active House, the Architecture of Comfort & Economy

- Thursday November 8 \*

- ▶ 09.00 Key note by Chiara Tonelli *Active House RhOME concept*  
<http://architettura.uniroma3.it/en/?docenti=tonellichiaara>
- ▶ 10.00 Book launch 'Active House - Smart Nearly Zero Energy Buildings'
- ▶ 10.30 Parallel workshop sessions:
  - A. MOBISTYLE Project: The innovative behavioural change concept and first business case ideas - **English**
  - B. Digital Design Meets Digital Use in BIM and smart buildings - **English & Italian**
  - C. Active House Specifications 3.0 & Active House Academy - educating professionals globally - **English**
  - D. Daylight Design workshop - **Italian**
- ▶ 13.00 Lunch & tour of campus Lecco
- ▶ 14.00 Student prize ceremony 2019
- ▶ 14.30 Key note by Brian Cody *Form follows Energy*  
<http://energydesign-cody.com>
- ▶ 16.00 Speakers panel key take aways & next steps
- ▶ 17.00 End of seminar



\* Programme, speakers and timings may be subject to changes



# *Active House, the Architecture of Comfort & Economy*

- KEY NOTE speaker bio



Ian Ritchie CBE RA is a British architect, artist and author, who founded Ian Ritchie Architects in 1981. His projects include the RIBA Award-winning Terrasson Greenhouse and London Regatta Centre, and American Institute of Architects Award-winning Royal Shakespeare Company Courtyard Theatre.

He graduated from Liverpool John Moores University School of Architecture in 1968.

He then went on to research Urban Studies for a year in Oita-Osaka, Japan and graduated with a Diploma in Architecture with Distinction from PCL, London (now University of Westminster) in 1972.[2] After working with Norman Foster (1972–76), Ritchie spent two years in France designing and constructing projects before joining Arup's Lightweight Structure Group.[3] In 1979, he founded Chrysalis Architects. In 1981 he created Ian Ritchie Architects in London, and co-founded the design engineering firm Rice Francis Ritchie (RFR) with Peter Rice and Martin Francis. He left RFR in 1990 and went on to a number of advisory and teaching roles alongside his work at Ian Ritchie Architects, regularly lecturing on topics including art, urbanism and regeneration at venues across the world.

During his career he has been awarded multiple accolades, including a CBE in 2000, and was elected a Royal Academician in 1998 and Professor of Architecture at the RA Schools in 2004. Ritchie (and Ian Ritchie Architects) have had over 60 national and international award nominations and have been shortlisted four times for the RIBA Stirling Prize and Mies Van der Rohe Prize. Ritchie was the first foreign architect to receive the French Academie d'Architecture Grand Silver Medal for Innovation.





# *Active House, the Architecture of Comfort & Economy*

- KEY NOTE speaker bio



**Gord Cooke** is a Partner with Construction Instruction Inc. Gord is a professional engineer with over 25 years of experience in the low and high-rise residential building industry. As an educator, industry consultant and much sought after presenter, Gord has a unique talent for taking the building science issues that he sees in the field, and presenting them in an easily understood and practical real-world manner. Gord has particular expertise in applied building science, energy efficient housing initiatives, innovative HVAC systems, ventilation and Indoor Air Quality (IAQ). He has developed and delivered a multitude of workshops in these fields, as well as sales and marketing courses for builders and real estate agents to help them best promote the features and benefits of high performance houses.

<http://buildingknowledge.ca/team-details/gord-cooke/>

<https://constructioninstruction.com/gord-cooke/>

[https://www.home-performance.org/events/hvac/Bio\\_Cooke.pdf](https://www.home-performance.org/events/hvac/Bio_Cooke.pdf)



## 6th Active House Symposium

# Active House, the Arch

- KEY NOTE speaker bio



Chiara Tonelli is associate professor in Architectural Technology at the Department of Architecture of the University of Roma Tre, where she is the Rector's delegate for 'Startup and Enterprise'.

She conceived and coordinated the two multidisciplinary teams from Roma TRE University who took part at Solar Decathlon, a competition among universities around the world for the design and construction of energy-efficient housing prototypes.

In 2012 in Madrid the housing prototype "MED in Italy" was the first Italian project admitted to the competition and was ranked third overall, while in 2014 in Versailles the Social Housing apartment, named "Rhome for Dencity", again the unique Italian presence, ranked first overall.

From 2015 she is responsible for the coordination of the Regional Energy Plan of Latium, where she operates to reduce regional energy consumption, to promote the transition to electricity and to diversify in the long-term sources of energy, reducing GHG emissions and energy dependency fossils, with the aim of spreading the low-carbon economy, to contribute to increasing the competitiveness of the local industry and the productivity and profitability of the agricultural production.

Over the past four years she has initiated processes of university-industry exchange, involving Italian and multinational companies in experimental activities, which have led to the filing of patents and the launch of spin-off. In this context, she is launching a building chain of wooden houses in Argentina, following the assignment of a Great Scientific and Technological Research Project on "Energy and Environment" of the Italian Ministry for Foreign Affairs in the years 2014-2016.

Architect since 1996, she is author of numerous projects for private and public entities, related to energy efficiency.

She is member of: the National Project 10,000 Social Housing Scientific Committee; the International Board pro Solar Decathlon Europe; and the Culture and Architecture Committee of the Bolzano Fair.

She is President of Casaclima Awards since 2013.

She has been: visiting professor at TUM Technische Universität of Munich, Germany, in 2014-15; member of Lazio Startup Commission in 2013-14 to promote innovation and entrepreneurship in the Region; and member of the Green Drop Award Jury at the Venice Film Festival in 2014.

She took part at over 100 meetings and conferences in Italy and around the world, among them the Republic of Ideas in Bologna in 2011, and the TEDx Milan in 2013. She has been host of several television programs on Architecture (RAI TRE "Geo & Geo – The ecological house" 2011-12, Leonardo "The house that will be" 2011-12, Real Time "Comfort for Strangers" from 2005 to 2013).

Since 2000 she teaches in the Architectural Technology domain, at the graduate level, master degree and postgraduate, in different Italian locations.

She speaks French, English and Spanish.



A black and white portrait of a man with a beard and glasses, resting his chin on his hand. He is wearing a dark shirt and a watch on his left wrist. The background is dark and out of focus.

He is also full professor and head of the Institute of Buildings and Energy at Graz University of Technology in Austria and visiting professor and head of the energy design unit at the University of Applied Arts in Vienna, Austria.

He is a Chartered Engineer (CEng MCIBSE) and speaks fluent English, German and Turkish. Prof. Cody serves on many advisory boards and juries. In 2014 his contribution to the design of the NRW state archive building in Duisburg, Germany was recognized with the Balthasar Neumann European Award for Architecture and Engineering.



# *Active House, the Architecture of Comfort & Economy*

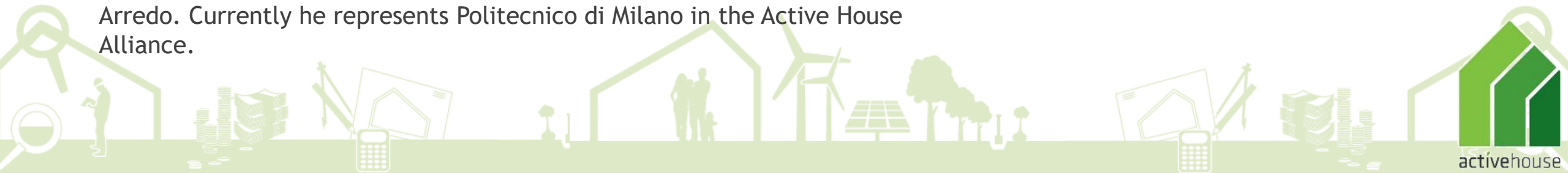
- speaker bios

## MARCO IMPERADORI

University Full Professor, researcher and designer, Marco Imperadori, focuses his interests in high energy- efficient buildings, Structure/ Envelope Building Systems and in general Sustainability. He is Msc and PhD in Building Engineering. Lecturer and Visiting Professor in many Universities and Institutions worldwide. Since 2015 visiting professor at USJ Macau. Author of scientific publications and essays. Founded in 1998, with Valentina Gallotti, Atelier 2, design studio placed in Milan, winning national and international awards and prizes, for applied experimental and academic research projects in practice.



Currently Rector's Delegate for the Far East representing Politecnico di Milano in Asia. Scientific coordinator of the international prize Compasso Volante Responsible for Politecnico di Milano in the building Resilience Network Android (EU-LLP). He is member of Fondazione Pesenti board, member of CasaClima scientific committee, member of Promozione Acciaio sustainability committee and scientific consultant of Federlegno Arredo. Currently he represents Politecnico di Milano in the Active House Alliance.



# *Active House, the Architecture of Comfort & Economy*

- speaker bios

## VINAY VENKATRAMEN

Vinay is the CEO and founder of Leapcraft [www.leapcraft.dk](http://www.leapcraft.dk) - a big data driven innovation consultancy. Prior to this he co-founded of the Copenhagen Institute of Interaction Design [www.ciid.dk](http://www.ciid.dk). He has also built a data visualisation academy in collaboration with the Danish Design Center [www.bigdataviz.dk](http://www.bigdataviz.dk). He works at the intersection of design and technology practices, consults to companies worldwide and lectures at various international venues. His current interests are in exploring the design & application of simple technologies to solve some of the world's wicked problems. Vinay is based in Copenhagen, Denmark but he frequently works and travels globally.



# *Active House, the Architecture of Comfort & Economy*

- speaker bios

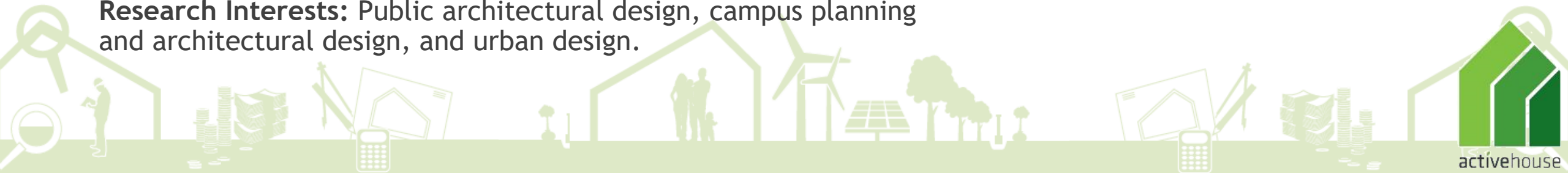
SUN Yimin

Professor & Executive Deputy Dean at School of Architecture, South China University of Technology(SCUT); Executive Deputy Director at State Key Laboratory of Subtropical Building Science.

Professor Sun was selected as national culturist of the project of talent selection by Guangdong government and was candidate for the national Outstanding Youth Foundation”. Being the first Doctor of physical architecture graduated in China, Prof. Sun always believes in applying theory to practice. He enjoys a national prime position in physical architecture research and large national stadium construction.

As member of national physical architecture Committee, Professor Sun has participated in judging, feasibility study, and project argumentation of several national stadium construction projects.

**Research Interests:** Public architectural design, campus planning and architectural design, and urban design.





# *Active House, the Architecture of Comfort & Economy*

- speaker bios

## ISTVAN KISTELEGDI

Professor Kistelegdi invented an own developed structure, building and settlement scaled planning technique, called Energia Design, in order to being able to create energy plus balance in building industries. His method integrates complex engineering tools, like climate, energy and aerodynamic CFD simulations with focus on defining new boundaries for comfort energy and environmental questions in the built environment. 2015 he was granted with the highest Hungarian award "Dennis Gabor Prize" for technical innovation and its implementation in practice. He studied Architecture in Würzburg, Kassel and ClimaDesing in Munich, Germany. Currently he leads the 'Energia Design Building Technologies' research group at the University of Pécs, János Szentágothai Research Centre and work as visitor lecturer at the Technische Universität München, University of Applied Sciences Würzburg-Schweinfurt and University of Applied Sciences Wismar. After a professional educational cooperation stay at the Metropolitan University of Denver, Colorado, USA his practical work results in implemented buildings in Hungary: a Holcim Hungarian Award winning Industry and office building, the first dwelling house refurbishment into an Active House in Hungary, and an adaptive adobe demonstration building with moveable building envelope skin and further plans for 118 apartment nearly zero energy residential park, etc. His forthcoming research project deals with artificial intelligence based building design methodology.



# *Active House, the Architecture of Comfort & Economy*

- speaker bios

## ALEXANDER KUCHERAVY

Alexander Kucheravy is an architect from Belarus. More than 10 years working with energy efficient projects using holistic approach. Became an active house verifier in april 2017. Participated in Active House Guidelines design in 2015. Realized two projects based on Active House principles. The first Multi-Comfort House in Belarus in 2013 and OptimaHouse in Ukraine in 2015. Absolutely shares sustainable development ideas. Implements Active House vision in his architectural practice with adaptation to local climate, culture, economic conditions. Since 2015 living and working in Ukraine.



# Programme committee

- ▶ Academic Chair:
  - ▶ Professor Marco Imperadori, Politecnico di Milano
- ▶ Alliance Chair:
  - ▶ Lone Feifer, General Secretary Active House Alliance
- ▶ Committee members:
  - ▶ Federica Brunone, PhD PhD Scholar - ABC Department, Politecnico di Milano
  - ▶ Lara Anne Hale, Post Doc student CBS / VELUX Group





# Parallel breakout sessions

- A. MOBISTYLE Project: Open discussion about the innovative behavioural change concept and first business case ideas session / Andre Litiu
- B. Digital Design Meets Digital Use: Active House principles in BIM and smart buildings” / Federica Brunone & Lara Hale
- C. Active House Specifications 3.0 / Carsten Rode, DTU DK; Bas Hasselaar, DGMR, NL; Amdi Worm, Arkitema consult, Denmark including Active House Academy / Alexander Kucheravy, Ukraine
- D. Daylight Design workshop - Italian



ReThink  
Daylight



A: MOBISTYLE Project: Open discussion about the innovative behavioural change concept and first business case ideas

- ▶ The MOBISTYLE consortium is cordially inviting all members of the MOBISTYLE Consumers Advisory Board (MCAB) and interested parties to discuss about the innovative MOBISTYLE behavioural change concept implemented in ICT solutions and the first business case ideas for the MOBISTYLE approach.
- ▶ MOBISTYLE (MOtivating end-users Behavioural change by combined ICT based modular Information on energy use, indoor environment, health and lifeSTYLE) received funding from the European Commission under contract number 723032. The aim of the project is to motivate behavioural change by raising consumer awareness through the provision of attractive personalized information on user's energy use, indoor environment and health, all enabled by an integrated information and communication technology (ICT) service. In this context, the anthropological people-centred approach is integrated into the MOBISTYLE approach putting users at the centre of the ICT tools development process. Behaviour change is achieved through awareness campaigns, which encourage users to be pro-active about their energy consumption and to simultaneously improve health and well-being. This awareness supports and motivates end-users to well informed pro-active behaviour towards more conscious energy use and health, thus empowering consumers and providing confidence of making the right choices. It is believed that this combination of information on energy, health and lifestyle provided via the MOBISTYLE ICT solutions will offer consumers more and lasting incentives than only information on energy use.

► Workshop lead: Andrei Litui, KTH, Stockholm, Sweden



# B: Digital Design Meets Digital Use: Active House principles in BIM and smart buildings

- ▶ “Digital Design Meets Digital Use” is a workshop where we explore from the design phase to the operational phase of smart building technologies. Within the design phase, we would discover how to integrate Active House principles into a BIM environment and within the operational phase, we consider the relevance of automation technologies for meeting or even exceeding the Active House Standards. Questions to ponder include: How can we translate the AH requirements into a digitalized form? How do the design and use phases align? What are practical ways of engaging with the end-user? How can architecture and engineering firms and policy-makers facilitate smart building innovation?
- ▶ After contemplating these issues, we would also like to reflect on technical limitations and the significance of the human perspective. Given informed and conscientious design, we believe digital technologies have the potential to take Active House to the next level.
- ▶ Workshop lead: Lara Anne Hale, PostDoc Fellow, and Federica Brunone, PhD Scholar, both researchers in the areas of Design Innovation and Smart Buildings. Dr. Hale is representing VELUX and Copenhagen Business School and Eng. Brunone is working within the Architecture, Built Environment and Construction Engineering Department of Politecnico di Milano and FederlegnoArredo.

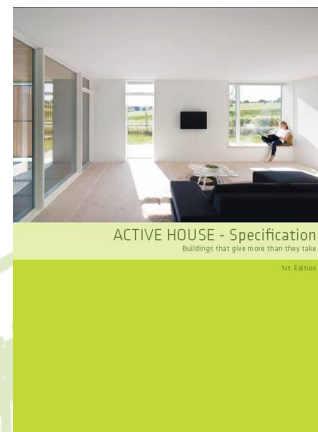




# C: Specifications 3.0 & Academy concept

- ▶ Active House Academy concept - how to train and educate verifiers and build up basics of Active House principles in the market place? / Amdi Worm & Alexander Kucheravy
- ▶ Active House Specifications 3.0 update - the specifications 2.0 were issued in 2013, and many good inputs and additions are in discussion, a few are:
  - ▶ how to benchmark nationally, how to incorporate the building regulations level?
  - ▶ what about the category 4, can any building become an Active House?
  - ▶ How can we incorporate acoustics as part of the comfort radar?
- ▶ Kurt Emil Eriksen, Amdi Worm, Bas Hasselaar & Carsten Rode

- ▶ Workshop lead: Amdi Worm



# Active House, the Architecture of Comfort & Economy

# AMDI WORM

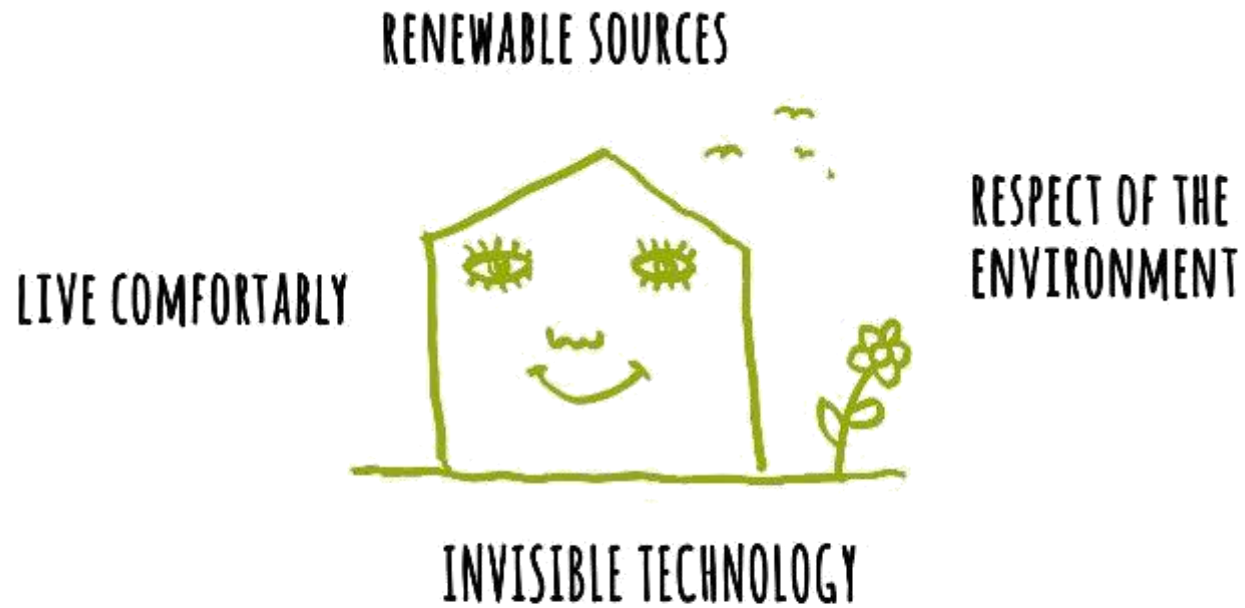


# D: Daylight Design workshop (Italian)

- ▶ IL RADAR ACTIVE HOUSE COME STRUMENTO DI COMUNICAZIONE E VALORIZZAZIONE DELL'IMMOBILE
- ▶ Durante l'intervento verrà analizzato l'indicatore "luce naturale" del Radar Active House e verrà messo in relazione con il livello di comfort percepito, il valore e la vendibilità di un immobile.  
Attraverso il software VELUX Daylight Visualizer dimostreremo come misurare la quantità di luce disponibile in ogni ambiente e capiremo come migliorare la qualità e il valore degli spazi senza influire sui costi.
- ▶ Workshop lead: VELUX Italia



Houses will be nodes of an extensive  
Internet network of energy





# The Lecco Campus

The Lecco Campus was founded in 1997 upon collaboration between the University and territorial bodies to satisfy the need for, in a highly industrial area with great employment potential, a university campus able to increase and drive collective growth through research and technological development.

The Lecco Campus offers a distinctly high level of education that encourages integration with the territory in terms of both the uniqueness of the entrepreneurial fabric and the campus' own research initiatives.

The study programs, consistently with the process of expansion and diversification underway at the Politecnico di Milano, have been devised to offer a valuable and structured academic opportunity, some of them unique to the Politecnico, that is fully integrated in the system and includes specific degree programs and research projects.











# Extra activities & Touristic programme

*7-9 November*

The extra activities and the touristic programme are separate from the professional programme of the Symposium, arranged for those, who book it.

Among others, we will organise site visits to two of our Italian Active Houses – VELUXlab in Milano and Casa sul Parco in Fidenza – as well as to the Active House Italia's Administrative Office in Paderno Dugnano. For further details, please consult our brochure [HERE](#). Please note that no visits will be possible without reservation!

## Wednesday November 7

- 9:30-11:30 Active House Openhouse (site visits)

## Friday November 9

- 15.00-18.30 Active House Openhouse (site visits)

We will also organise touristic activities in the surrounding area so that you could better discover the beauty of Italy. For more details on the touristic options to visit Lecco and the surrounding cities, please consult our brochure [HERE](#). Please indicate your interest if you wish to participate and we will inform you about the final price soon. Expected price level is 120 – 150 € including dinner & lunch.

## Thursday November 8

- 20:00 Dinner (included in Touristic programme Option 1 & Option 2)

## Friday November 9

- 10:00-14:00 Touristic programme Option 1: LECCO
- 10:00-18:00 Touristic programme Option 2: VARENNA/BELLAGIO BY LAKE





# Practicalities for your planning & booking

- ▶ Recommended hotels

- ▶ <https://www.activehouse.info/save-the-date-7-8-november-active-house-symposium/>

- ▶ Travels

- ▶ Lecco is within reach of all 3 Milanese airports: Linate, Malpensa & Bergamo (closest)

- ▶ Recommendations for arrival by

- ▶ Plane

- ▶ Train

- ▶ Car

- ▶ Boat

- ▶ <https://www.lakecomo.is/be-our-guest-accommodation/transports/>



See you in Lecco!





# LABELS AWARD winners

- ▶ Marco Imperadori, Professor Politecnico di Milano, Italy
- ▶ Bas Hasselaar, DGMR consultant, the Netherlands
- ▶ Emilia-Cerna Mladin, Professor, Romania
- ▶ Shaun Joffe, Executive Director of Sustainability Great Gulf Group, Canada
- ▶ Eileen Meyer, architect, Italy
- ▶ Istvan Kistelegdi, Professor, Hungary



See you in Lecco!







What is actually

# ACTIVE HOUSE

- buildings that create healthier and more comfortable lives for their occupants with a minimal climate impact