



# Active House

Edifici che producono più di quanto consumano

Presentato da:

Mónika Tornóczky,  
General Secretary,  
Hungary Green Building Council

# Active House

## L'origine del progetto



### Piano EU 2020

- 20% Riduzione CO<sub>2</sub>
- 20% Energia rinnovabile
- 20% Efficienza energetica

### Direttive sulle prestazioni energetiche degli edifici (2010)

- Edifici a energia quasi zero (NZEB)
- Piani nazionali di attuazione

### Applicazioni a livello nazionale (2011=>)

- Interpretazione della normativa NZEB
- Metodologia di sviluppo
- Aggiornamento legislativo e dei requisiti edilizi

# Active House

## La situazione attuale



### **40% dell'energia mondiale**

- viene utilizzata per il riscaldamento e il raffrescamento degli edifici
- il 90% del patrimonio edilizio attuale sarà ancora in uso nel 2050

### **Trascorriamo il 90% del nostro tempo**

- all'interno di edifici,
- almeno il 30% degli edifici non offre un clima interno sano

### **Le sfide climatiche si giocano a livello globale**

- le risorse sono limitate
- i rifiuti aumentano

**E' ora di agire!**

Le tecnologie già esistenti possono fare la differenza!

# Active House: la visione

**Edifici che producono più di quanto consumano**



## **Comfort**

- Crea condizioni abitative migliori*



## **Energia**

- Permette agli edifici di ottenere un bilancio energetico positivo*

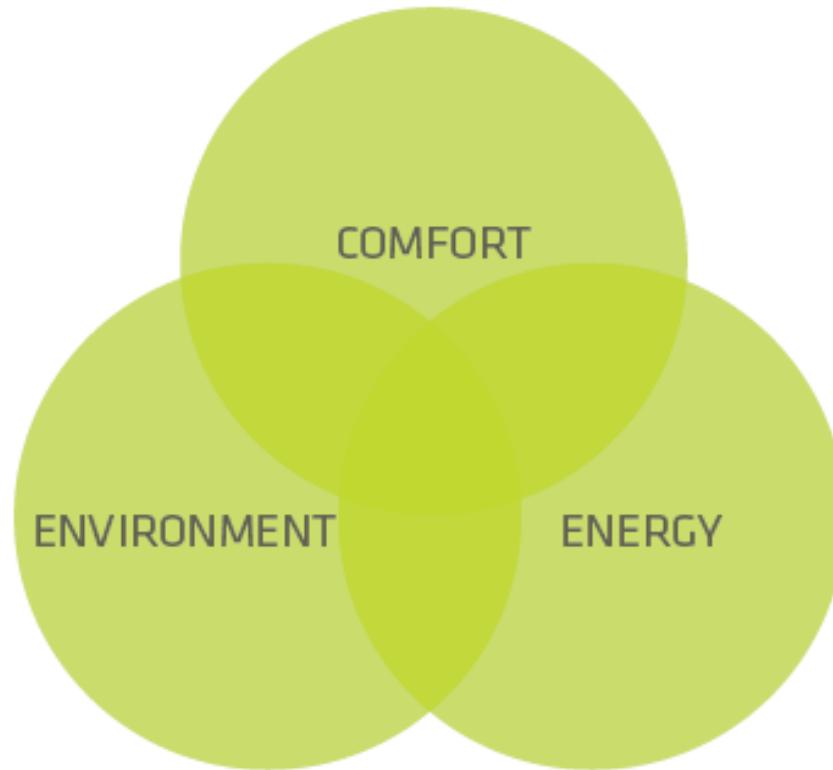


## **Ambiente**

- Ha un impatto positivo sull'ambiente*

# Active House: la visione

## Edifici che producono più di quanto consumano



L'idea su cui si basa il concetto di Active House è quella di realizzare edifici che permettono una vita sana e confortevole a chi li abita, senza impattare in modo negativo sul clima.

# Active House Alliance

## Partner e target groups



# Active House: approfondimenti

**Edifici che producono più di quanto consumano**

Criteri quantitativi

Classificazione: 1 (migliore) – 4 (accettabile)

Comfort

- Luce Naturale
- Temperatura degli ambienti
- Qualità dell'aria all'interno degli ambienti

Energia

- Consumo energetico
- Fornitura energetica
- Prestazione energetica

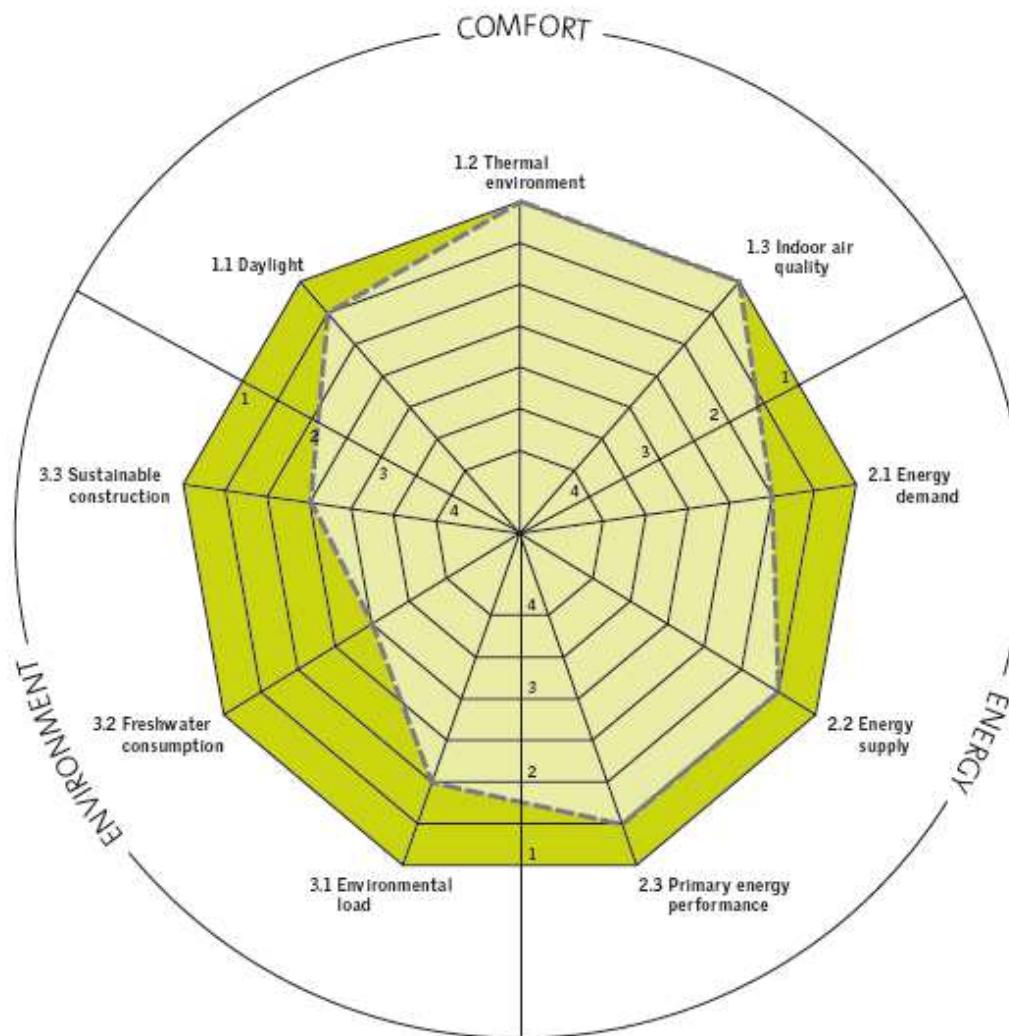
Ambiente

- Carico ambientale
- Consumo di acqua
- Edilizia sostenibile



# Active House: approfondimenti

## Prestazioni nel diagramma radar



# Active House Alliance

## Progetti in evidenza sulla homepage del sito



COMPLETION: 13 DECEMBER 2012

### BOTTICELLI PROJECT - CASA ECO PASSIVHAUS -

MASCALUCIA - CT - SICILY, ITALY

Botticelli Project intends to diffuse concept of Active House building which focus the Third Industrial Revolution [UK]



COMPLETION: APRIL 2009

### HOME FOR LIFE

LISTRUP, DENMARK

Home for Life is inspired by a traditional Danish 1 : 12 scale model. The house has a relatively small surface with many windows.



COMPLETION: 2009

### OSRAM CULTURE CENTRE

COPENHAGEN, DENMARK

A very attractive energy and indoor climate renovation of a former industrial building used as a cultural centre as part of a neighbourhood renewal project.



COMPLETION: AUGUST 2011

### CARBONLIGHT HOMES

KETTERING, UNITED KINGDOM (GREAT BRITAIN)

The CarbonLight Homes provide bright, healthy living & energy efficiency and a respect for the environment. This project is based on a deep understanding of sustainable living...



COMPLETION: UNDER CONSTRUCTION

### HOTT | HOUSE OF TOMORROW

STERKSENLAND, NETHERLANDS

HoTT is dutch's first building completely designed by Stijn Bouwman and Active House. The layout is based on a residential program.



COMPLETION: OCTOBER 2009

### SOLAR-ACTIVEHOUSE

KRAIG, AUSTRIA

Energy used for heating/ hot water - whether it's from wood, coal, oil or natural gas - has literally been burned up. A solution is the solar-activehouse.



COMPLETION: MARCH 2012

### DE POORTERS VAN MONTFOORT

MONTFOORT, NETHERLANDS

De Poorters van Montfoort are the first houses in the Netherlands to apply the principles of Active House, using a sustainable renovation approach developed by VELUX Group and Dentoss...



COMPLETION: SEPTEMBER 2009

### HOUSE OF THE FUTURE

REGENSBURG, GERMANY

How will we live and heat our homes in the future? Regensburg, Germany impressively demonstrates its vision of the future.



COMPLETION: NOVEMBER 2010

### SOLHUSET - DENMARK'S MOST CLIMATE FRIENDLY NURSERY

HØRSHØJ, DENMARK

Children in Hørsholm can now play in the most climate-friendly nursery in Europe.



COMPLETION: JUNE 2012

### ECO-ENERGY RETROFIT

SE-CAST, UNITED KINGDOM (GREAT BRITAIN)

Retrofitting an 1898 solid wall terraced house within the Triplex Energetics concept and Active House principles against a 1990 baseline



COMPLETION: SEPTEMBER 2011

### ISOBO AKTIV - A HOUSE FOR THE FUTURE

SANNAES, NORWAY

Jærenhus was among the first in Norway to develop this category, ISOBO, was established in 2003. The company has since developed a new active design...



COMPLETION: OCTOBER 2010

### SUNLIGHOUSE

PRESSbaum, Vienna, AUSTRIA

Sunlighouse is Austria's first carbon-neutral single-family house. Nestled in a mountainous region, the home's sloping roof and architectural elements take advantage of the sun to...



COMPLETION: NOVEMBER 2010

### ENERGYFLEXHOUSE

Hørnstrup, Copenhagen, DENMARK

EnergyFlexHouse is two one-family houses, each of them a test building, and the other building is a one-family house.



COMPLETION: NOVEMBER 2010

### LICHTAKTIV HAUS

HAMBURG, GERMANY

LichtAktiv Haus is an energy-efficient renovation of a former office building.



COMPLETION: SEPTEMBER 2011

### THE FIRST ACTIVE HOUSE IN RUSSIA

MOSCOW, RUSSIAN FEDERATION

The First Active House in Russia is designed to set a new standard for residential construction in Russia. The house design is based on the Active House principles.



COMPLETION: 15.10.2012

### GREAT GULF ACTIVE HOUSE

THORNOLD, ONTARIO, CANADA

Great Gulf Active House was achieved through a collaborative effort between architects, the award-winning Toronto architecture firm and committed to...



COMPLETION: 2010

### LUMINA HOUSE

SLUBSKA, POLAND

Lumina House is an energy efficient, ecological so comfortable, intelligent, optimal and affordable new



COMPLETION: DECEMBER 2012

### TRANSFORMATION POORTERS VAN MONTFOORT

MONTFOORT, NETHERLANDS

- DE POORTERS VAN MONTFOORT - Light is an experience, air is the fuel that makes living possible.



COMPLETION: 2009

### GREEN LIGHTHOUSE

COPENHAGEN, DENMARK

Green Lighthouse is Denmark's first public CO2 neutral building than a year in a close public/private partnership.



COMPLETION: APRIL 2012

### NATURFREUNDEHAUS KNOFELER

SCHIESSBERG/KNOFELERSTR. 4-2882 HIRSCHWANG, AUSTRIA

The old hut burned down in April. New building site more user-friendly than the old one and more user-friendly for t



COMPLETION: 2011

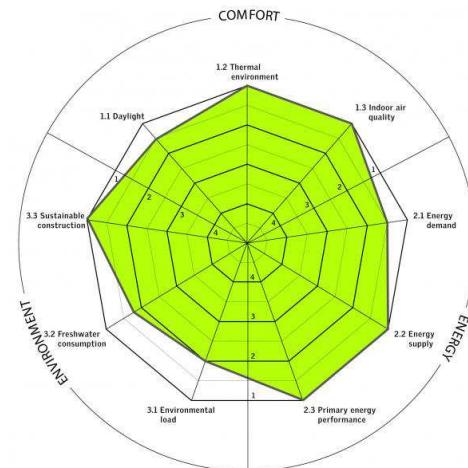
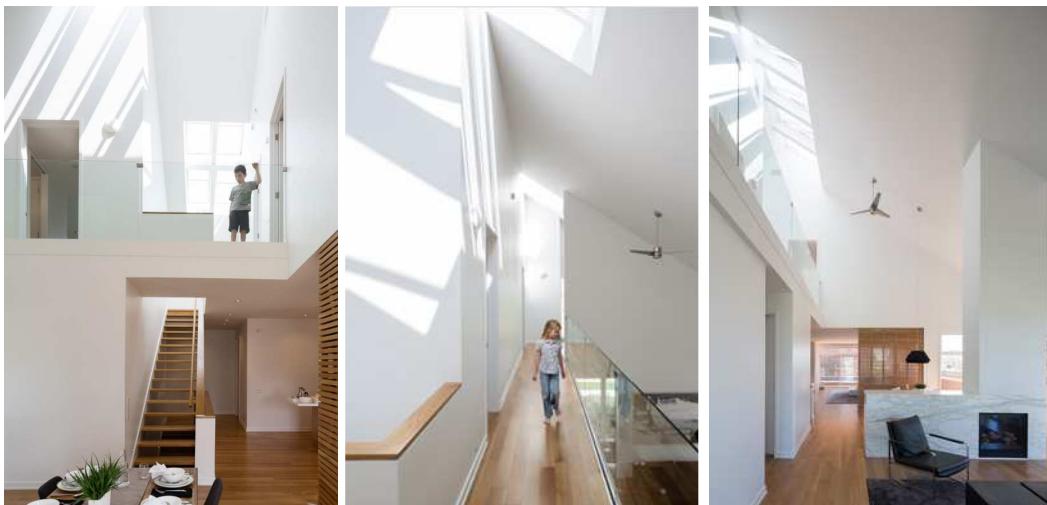
### VELUXLAB

MILAN, ITALY

VELUXlab is the first Italian nearly zero energy building in a University Campus. It is located in the Bowls Campus of Politecnico di Milano and it is a new laboratory for research and development.

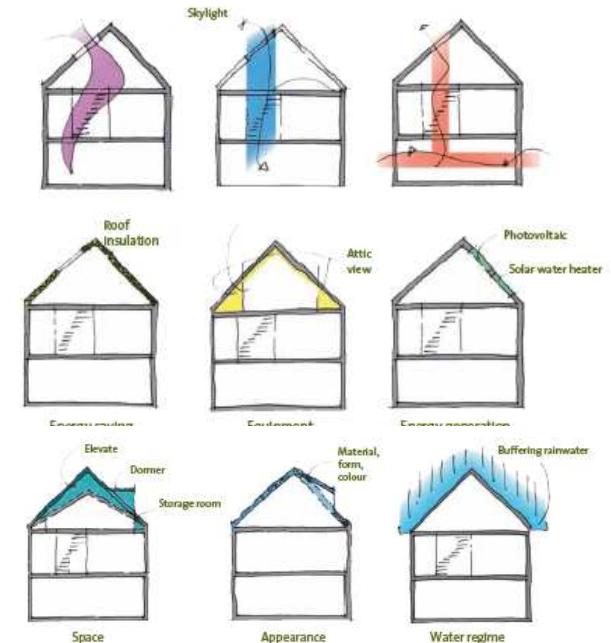
# Active House

## Great Gulf Active House, Canada



# Active House

## Ristrutturazione Montfoort, Olanda



The general Active House Radar is calculated based on the performance before and after the renovation.  
■ Calculation performance after renovation  
■ Calculation performance before renovation

# Active House

## Sunlight House, Austria



"Every morning we enjoy the first rays of sunshine on our patio windows. We have four double and three single doors that almost drag the garden into the house."

Dorfstetter family, living in Sunlighthouse



# Active House

## - ISOBO Active House, Norvegia



The Jadarhouse ISOBO Aktiv house is the first home in Norway that integrates the qualities of the traditional timber house and the principles of Active House to provide high living comfort and low energy consumption.



# Active House

- [www.activehouse.info](http://www.activehouse.info)

The specifications define 9 parameters that have to be evaluated when designing an Active House. The Active House radar illustrates the performance of the building.

Both are absolutely free to use.

[READ THE SPECIFICATIONS](#) ▶ [CREATE A RADAR](#) ▶

SCARICA  
IL MANUALE

CREA IL TUO RADAR

ISCRIVITI ALLA  
NEWSLETTER



ACTIVE HOUSE - the specifications

for RESIDENTIAL BUILDINGS  
2nd edition

The Specification



ACTIVE HOUSE NEWSLETTER 15/2013 15/2013



UPCOMING EVENTS  
Budapest, October 25-26: Symposium Sustainable comfort in buildings in Budapest

The logo of the 2nd International Active House symposium is the development of nearly zero-energy buildings and the long term political targets for sustainable buildings in Europe. The talks are divided into three sessions:

- political targets and the human need for sustainable buildings with healthy comfort
- case studies from international experience and examples of local projects
- a presentation of the Active House specifications and research on international green architecture

The symposium will end with a plenary debate on sustainable buildings with focus on human well-being and comfort. Complete program: [http://www.activehouse.info/newsletter/2013/10/25-symposium-sustainable-comfort-in-buildings-in-budapest.html](#)

October 24: Webinar Multi-Comfort House in Belarus

Hear from the architect, Alexander Kucheravy, about his thoughts and process behind the design of the Multi-Comfort House in Belarus as an international project implemented by Saint-Gobain Gypsum LLC and Sovremenny Kryukovyy Dom (Modern Frame House LLC) and designed by the Belarusian Institute of Architecture. The house was opened for visitors on 23 May 2013. Find more information on the [http://www.activehouse.info/newsletter/2013/10/24-webinar-multi-comfort-house-in-belarus.html](#) if you wish to follow the webinar.

Nordic Passiv House conference  
The Nordic Passiv House conference at the sixth *EnergieNord* conference where Nordic and European experts will meet, present and discuss the latest developments in future possibilities for passive houses and nearly zero-energy buildings. The conference will take place from October 15-17 and includes presentations by Olafur Elisson-Dodds, Peter Pihlsson on the Active House vision for buildings.



NEWS  
Active House open in Canada  
The Great Gulf Active House in Canada opens on October 10. Now is the time to book your visit! The Great Gulf team will be the guest of honor at this official opening. Follow the building through [LIVE video](#). If you wish to attend RSVP to [RSVP@activehouse.info](#)

Active House Alliance nominated in Denmark  
The national Danish radio and the newspaper "Computer" launched a competition to find the best example of sharing knowledge about sustainable projects which are initiated by citizens. The competition received many entries and the projects were presented. The Active House Alliance made it to the final round as one of 27 projects.

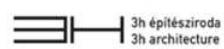


CESBA  
CESBA is on the one hand a methodology to assess existing buildings and on the other hand a methodology to help EU projects to reach higher convergence by a common process

Active House will participate in the next workshop to be organized by the CESBA network.

Sustainable Buildings: an EU Commission initiative  
The European Commission wants to gather views and additional information from the public and stakeholders on how to achieve better environmental performance of buildings. The Active House Alliance has been invited to input and additional information to the European Commission.

Busy summer  
During the summer, the Active House Alliance gave presentations and organized side events at several European conferences on sustainable buildings. Among others: [DURABLE BUILDINGS 2013](#) in Berlin, [Project Zeta](#), [Ventilation Cooling conference](#) in Athens, as well as being present at [PLEA](#) in Madrid.



CENERGIA

Technical University of Denmark



Institute of  
Building Research  
& Innovation

**FEMIB**

ARCHITEKTURBÜRO REINBERG ZT GMBH

**HunterDouglas**



Nederlandse  
Branchevereniging  
voor de Timmerindustrie



POLITECNICO  
DI MILANO

**DUCO**  
Ventilation & Sun Control

SAINt-GOBAIN  
GLASS



**RENSON**  
Creating healthy spaces

**somfy.**

**VELUX®**



**SENSIEL**  
Energy Efficient Solutions

**blyweert**  
aluminium  
exactly your profile



**esbensen**  
FÅDGYVENDE INGENØRER A/S

**ROCKWOOL**  
FIRESAFE INSULATION

**SMITS**  
ROLLUIKEN  
ZONWERING

**cni** center for ny  
Teknologisk Institut  
industrialisering

**GREAT GULF** | Live greatly.

Framtidens Aktivhus AS  
et firma i Ligaard-gruppen

**SAPE**

**GRUNDFOS**



**VFF**  
Verband Fenster + Fassade

**zehnder**  
group

**ESSO**  
EUROPEAN SOLAR SHADING ORGANIZATION  
Energy Savings & Comfort

**AAEC**  
Asociația Auditorilor Energetici pentru Clădiri

**AALBORG UNIVERSITY**  
DENMARK

**UCA**

**ula**

**LIVINGLab**  
by DOVISTA

**DBRI**  
Danish Building Research Institute  
AALBORG UNIVERSITY

Association  
of wood housing  
Russia

**Midwest Energy Efficiency**  
Research Consortium

**TECHNISCHE  
UNIVERSITÄT  
DARMSTADT**

**iSBE**

**Grazie per l'attenzione!**

Vuoi far parte dell'Alleanza e seguirne gli sviluppi?  
[www.activehouse.info](http://www.activehouse.info)

Contatta la segreteria:  
[secretariat@activehouse.info](mailto:secretariat@activehouse.info)