



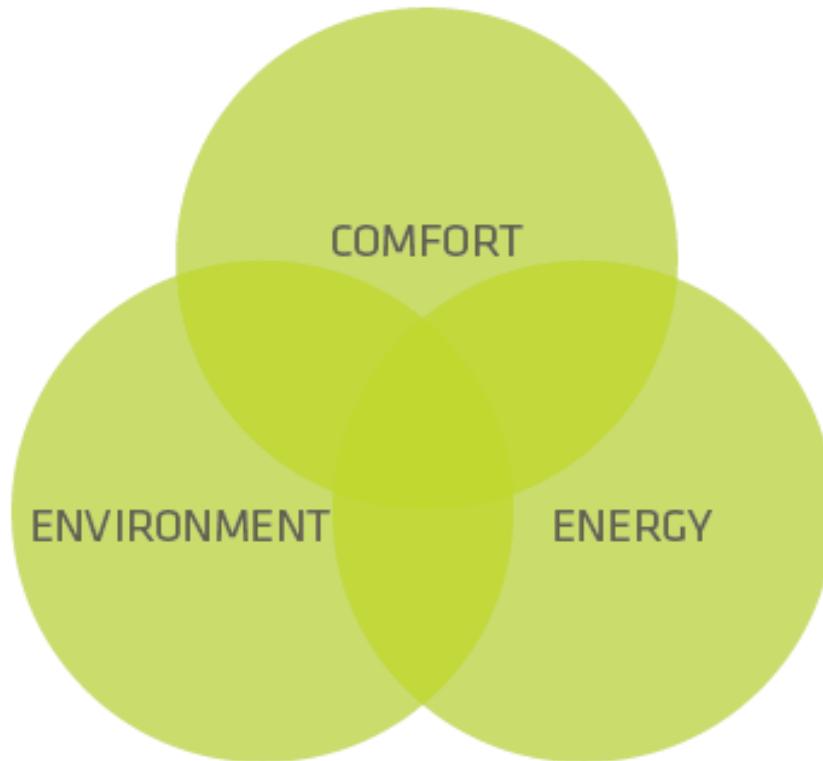
AKTIVHUS – Et eksempel på bæredygtigheds vurdering

INNOBYG Forårskonference

12.3.2015

Kurt Emil Eriksen
Secretary General
Active House Alliance

Active House – en vision



Active House er visionen om at skabe sunde og mere komfortable bygninger for beboere og brugere, med positiv indflydelse på klima og miljø



BYGGERIET SKAL BIDRAGE TIL DEN GRØNNE OMSTILLING

læs om hvordan

NYT

Ny analyse: Vind er billigst

Den billigste måde, Danmark kan skaffe sig ny elkapacitet på, er ved at sætte nye vindmøller op på land. Det viser en ny analyse...

Grønne ambitioner intakte med ny delaftale

Regeringen offentliggør i dag en vækstdelaftale på energiområdet, som hovedparten af Folketingets partier er enige om. Klima-...,



KLIMA-, ENERGI- OG BYGNINGSMINISTEREN

Det er en betydelig udfordring at omstille det danske samfund. Det er afgørende, at vi tilrettelægger indsatsen, så den bliver både miljø- og ressourcemæssigt effektiv, og så den understøtter vækst og udvikling.

- Rasmus Helveg Petersen

GENVEJE

- ➊ Serviceeftersynet af Nordsøen
- ➋ Energiaftale
- ➌ Byggeprojekter
- ➍ Klimaforhandlinger i FN
- ➎ Hvad forhandler vi om i EU?
- ➏ COP19

"En frivillig bæredygtighedsordning kan være med til at give dansk byggeri en førerposition inden for bæredygtighed.

Vi har set med indførelsen af de frivillige lavenergiklasser, at branchen meget hurtigt integrerede dem i deres løsninger.

Det er den samme gradvise mekanisme, vi ønsker her"

The International Active House Alliance

- medlemmer og målgrupper



Members Of the Active House Alliance March 2015:



In corporation with:



Stiftende partnere:

CENERGIA
Herlev Hovedgade 195 st., 2730 Herlev. Tlf.: + 45 44 66 00 99


SAINT-GOBAIN

KUBEN | NRG
MANAGEMENT

esbensen
RÅDGIVENDE INGENIØRER A/S

VELUX®

AART / architects


**TEKNOLOGISK
INSTITUT**

activehouse.INFO
NETWORK AND KNOWLEDGE SHARING

AktivHus Danmark

Aktuel medlemsliste:

VELFAC A/S

KFS Boligbyg A/S

Randers Arkitekten

Danfoss A/S

Visibility ApS

Cenergia

Saint-Gobain Nordic A/S

Kuben Management

VELUX Danmark A/S

AART Architects

Teknologisk Institut

Cowi

Steni Danmark

Inwido Danmark

Grundfos DK A/S

Esbensen A/S



AktivHus Danmark

Foreningens formål er at udbrede bæredygtighed i dansk byggeri og adresserer i særlig grad små og mellemstore bygninger.

AktivHus Danmark fokuserer på en helhedsorienteret tilgang til byggeri, hvor både indeklima, energi og miljøparametre vurderes, og integreres i bygningens design. Vurderingen sker med udgangspunkt i Active House klassificeringsværktøj, der fungerer som et rationelt design- og evalueringsværktøj for bæredygtigt byggeri, og sikrer dermed at omkostninger til processen holdes lave. AktivHus designstrategi og klassificering er relevant for både nybyggeri og renovering.

AktivHus Danmark er et nationalt initiativ, en forening der vil tage udgangspunkt i den Internationale Active House Alliances arbejde, som bl.a. involverer de danske virksomheder VELUX A/S, Grundfos A/S, Cenergia A/S samt forskningsinstitutionerne DTU-BYG, Aalborg Universitet og Teknologisk Institut. Foreningen etablerer sekretariat ved Dansk Byggeri.



activehouse.info
BUILDINGS THAT GIVE MORE THAN THEY TAKE

aktivhus

Nyheder



16-01 | AktivHus Danmark klar til at spille en rolle

Den internationalt anerkendte Active House Alliance er nu en officiel spiller på det danske marked for designværktøjer til bæredygtigt byggeri

05-01 | AktivHus Danmark - Bæredygtig mærkning af mindre bygninger

→ [Se alle nyheder](#)

Medlemmer

KFS Boligbyg A/S
Randers Arkitekten
Danfoss A/S
Visibility ApS
Cenergia
Saint-Gobain Nordic A/S
Kuben Management
Esbensen A/S
AART Architects
Teknologisk Institut
VELUX Danmark A/S
VELFAC A/S
Inwido Danmark
Steni Danmark A/S
Grundfos DK A/S
Cowi



Bliv medlem

Foreningen henvender sig til arkitekter, ingeniører, konstruktører, typehusfirmaer, entreprenører, håndværkere, bygherrer, byggematerialeproducenter, etc.

For medlemskab samt yderligere information kontakt:

- Brian Mønichen Wendlin,
brian.wendlin@velux.com
- Mette Mens Rasmussen,
info@aktivhusdanmark.dk

Du er også velkommen til at ringe til sekretariatet på tlf. 72 16 02 54

→ Se priser, vedtægter og mere om medlemskab [her](#)

www.activehouse.info

activehouse.info
NETWORK AND KNOWLEDGE SHARING

ABOUT
VISION, SPECIFICATION,
WHO IS BEHIND, FACTS

CASES
INFORMATION, DETAILS,
PICTURES AND MORE

NEWS & EVENTS
LATEST, KNOWLEDGE,
TRENDS ETC.

JOIN US
SIGN UP, THE ALLIANCE,
NETWORK, ARCHIVE

HOME **PRESS** **LOGIN**

AN ACTIVE HOUSE CONTRIBUTES POSITIVELY TO THE ENERGY BALANCE OF THE BUILDING

HIGHLIGHTED CASES

COMPLETION: 2011
VELUXLAB
BOLLENS, ITALY

VELUXlab is the first Italy nearly zero energy building in a University Campus. It is placed in Bovisa Campus of Politecnico of Milan and it is a new laboratory for research.

COMPLETION: 2011
BOTTICELLI PROJECT - CASA ECO PASSIVA SICILIA - PASSIVHAUS -
MASCALUCIA - CT - SICILY, ITALY

Botticelli Project intends to diffuse concept of Active Houses in Sicily. Botticelli is a building which focus the Third Industrial Revolution [Jeremy Rifkin]. A Building to start...

COMPLETION: OCTOBER 2009
SOLAR-ACTIVEHOUSE
KRASNO, AUSTRIA

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

LATEST CASES

COMPLETION: SEPTEMBER 2014
HEALTHY HOME TOWNHOUSES
STORDAL, NORWAY

On 29 October, a new national chapter in Denmark arising from the International Active House Alliance will be launched during the national conference Building Green. The Danish Active House...

CALL FOR PAPERS FOR THE SUSTAINABLE BUILT ENVIRONMENT CONFERENCE 2016 IN HAMBURG

NEWS **PETRA PALFI**

The organisers of the Sustainable Built Environment (SBE) Conference 2016 in Hamburg are pleased to announce the call for papers for the SBE16 Hamburg: Strategies – Stakeholders – Success.

23. MARCH 2015
ACTIVE HOUSE DENMARK IS READY TO PLAY ITS ROLE

NEWS **PETRA PALFI**

Active House Denmark (i.e. Aktivhus Denmark), the new chapter of Active House Alliance based in Denmark, will be present at the 29 October 2014, held its first conference on 15 January in Denmark and now became an...

14. DECEMBER 2014
AKTIVPLUS AT THE BAU 2015 TRADE FAIR

NEWS **PETRA PALFI**

The World's Leading Trade Fair for Architecture, Materials and Systems, BAU 2015, believed to attract around 23 500 people, will open its doors to the public on 19 January 2015 for 6...

26. NOVEMBER 2014
ACTIVE HOUSE WORKSHOP IN HUNGARY REACHED ITS GOAL

NEWS **STELLA BROZEK-EVERAERT**

On 26 November, the Active House Alliance and HuGBC (Hungary Green Building Council) held a very dynamic professional event. The Kinnarps House showroom offered an inspiring venue for the...

17. NOVEMBER 2014
GREAT GULF ACTIVE HOUSE WINS WOOD WORKS AWARD IN CANADA

NEWS **STELLA BROZEK-EVERAERT**

Wood WORKS! is a national, industry-led ministry of the Canadian Wood Council that promotes and supports the use of wood in all types of construction. The objective is to encourage the use of...

13. NOVEMBER 2014
CALL FOR PAPERS FOR THE 2ND AKTIVPLUS SYMPOSIUM IN GERMANY

NEWS **PETRA PALFI**

AktivPlus eV is pleased to announce its call for papers for its 2nd AktivPlus Symposium, which will take place on 21 May 2015 in Stuttgart, Germany within the framework of the Clean Energy Building.

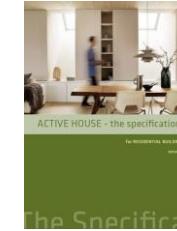
22. OCTOBER 2014
DANISH ACTIVE HOUSE ALLIANCE TO BE LAUNCHED ON 29 OCTOBER 2014

NEWS **PETRA PALFI**

On 29 October, a new national chapter in Denmark arising from the International Active House Alliance will be launched during the national conference Building Green. The Danish Active House...

> MORE NEWS & KNOWLEDGE

Download
SPECIFICATION og GUIDELINES



Beregn dit projekt og lav din egen radar



Se VIDEO om alliance



Abonner på nyhedsbrev

ACTIVE HOUSE NEWSLETTER

15:2013

OCTOBER 2013



02.03.2015

amark A/S

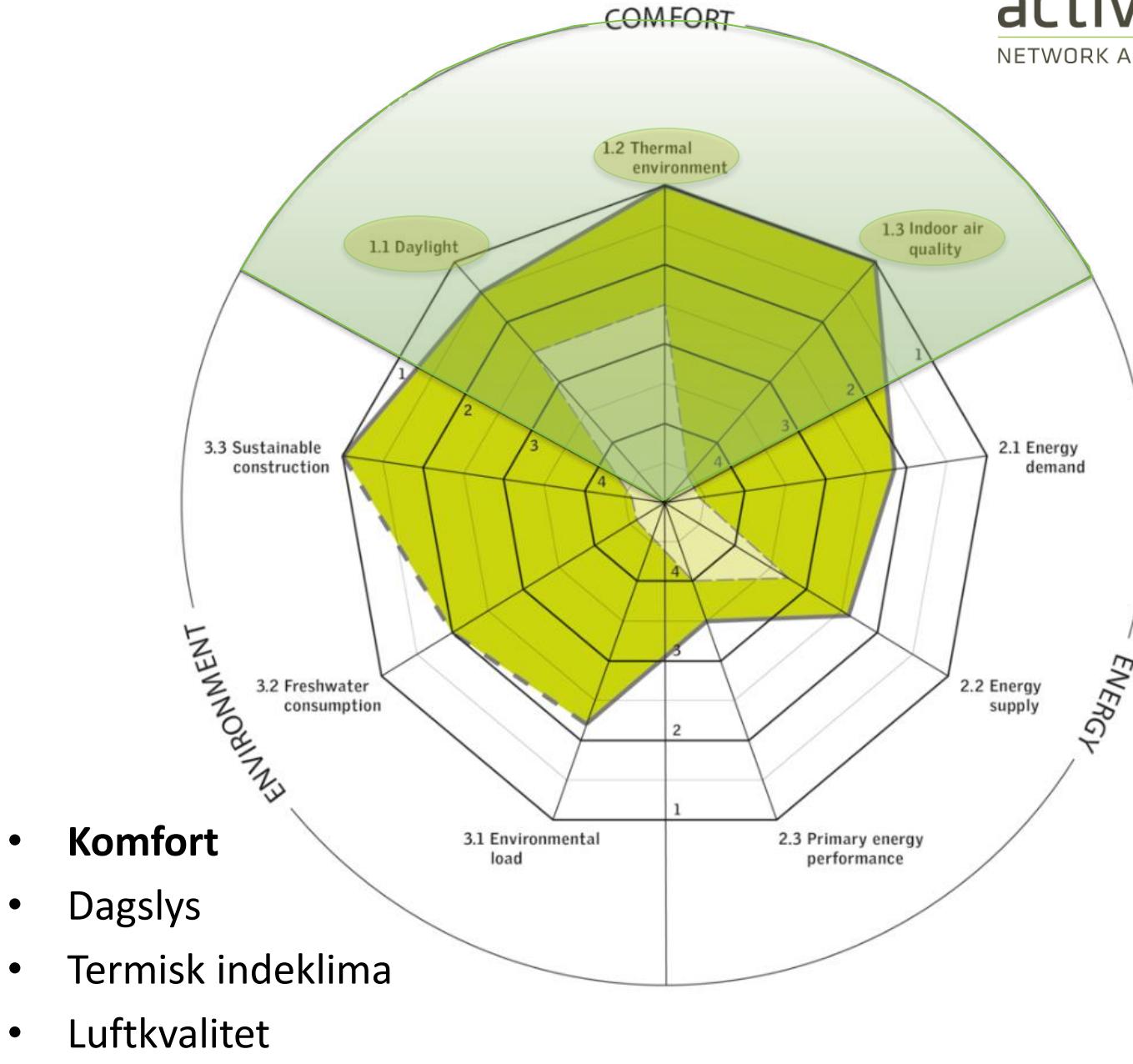


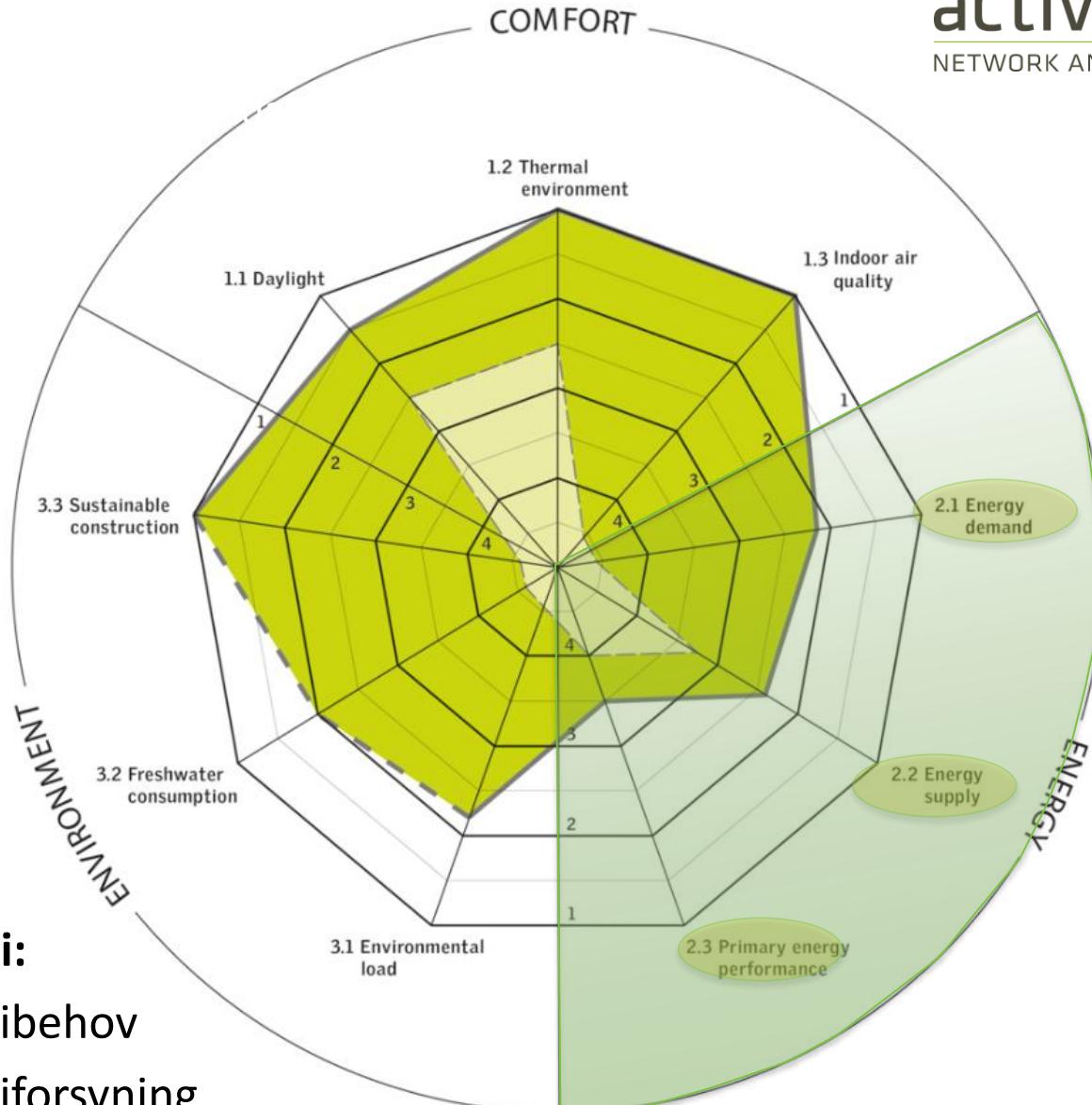
ACTIVE HOUSE - the specifications

for RESIDENTIAL BUILDINGS

2nd edition

The Specifications





- **Energi:**
- Energibehov
- Energiforsyning
- Primær energi performance

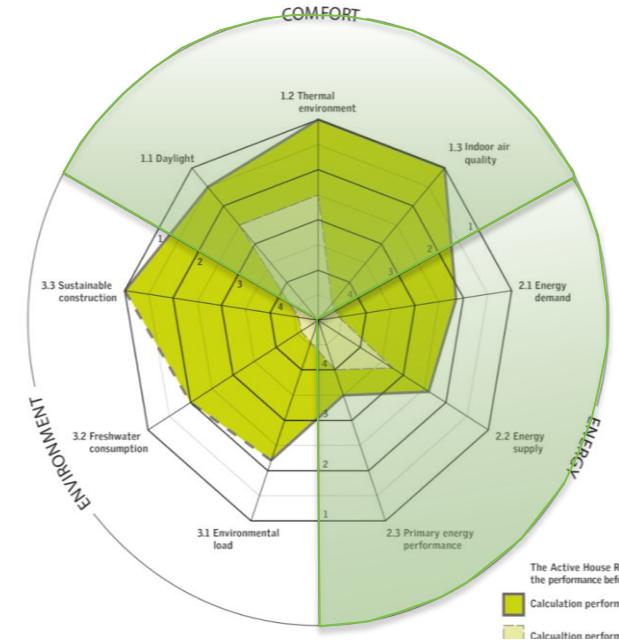


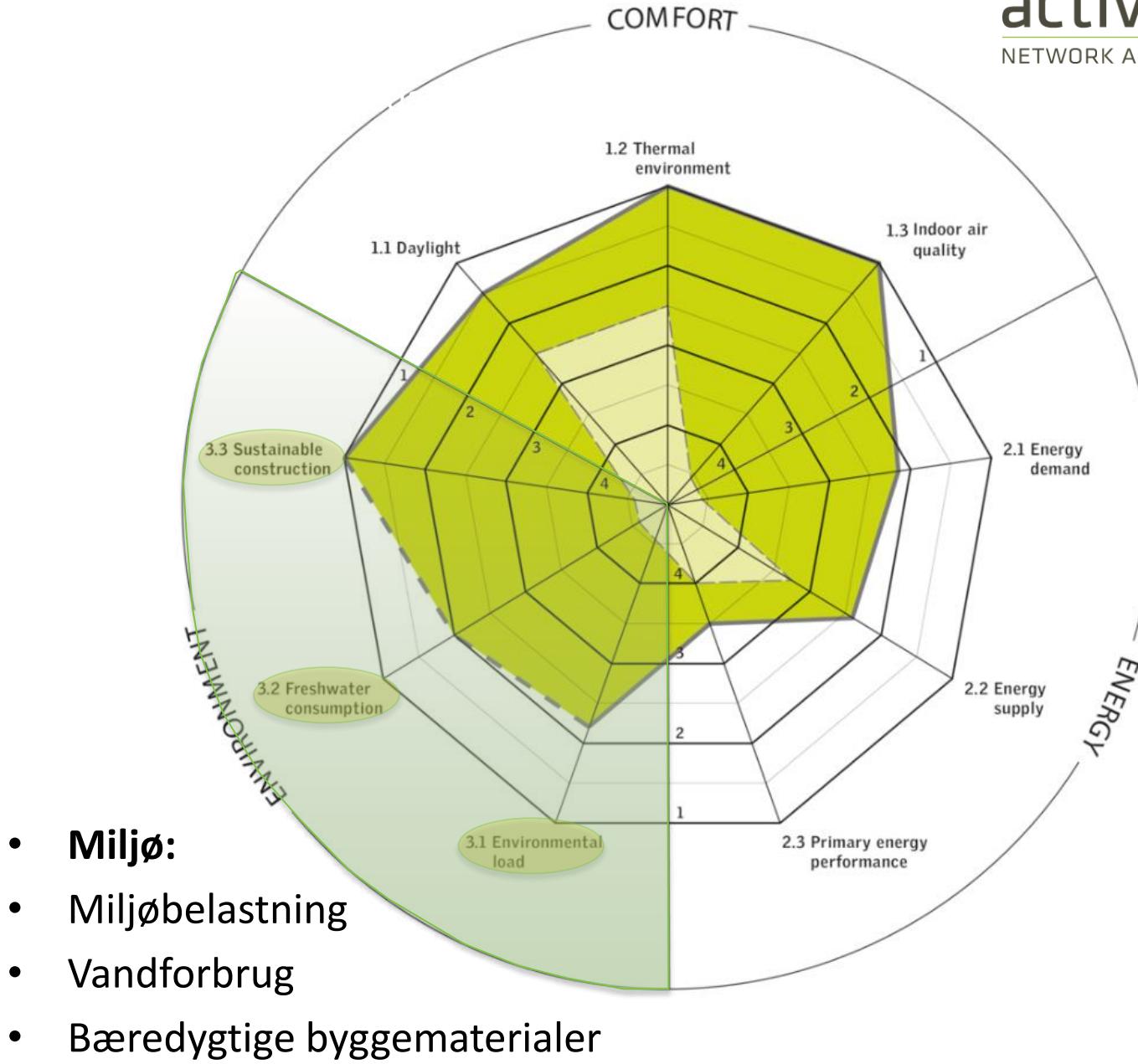
National plan for nearly zero-energy buildings

Danish compliance with Article 9 of Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings



November 2012







activehouse.INFO

NETWORK AND KNOWLEDGE SHARING

HELP

CLOSE

START

Active House calculation tool is designed by Danish Technological Institute for the Active House Alliance.
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Use of the tool require membership of the Active House Alliance and is on users own responsibility.
Active House Alliance takes no responsibility for the use of the tool or for the results gained from it.

Menu		Project data	Results
P	R		
Project			
Project data		?	
Comfort		Energy	
Energy		Environment	
Environ- ment		Active House radar	
Results		Project	
26 days left			
Licenses			
Save	as		
Calculation		Comfort	
Calculation type:		Main calculation	1.1 Daylight: > 3%
Evaluation type:		New building	1.2 Thermal environment: best level
Building information		1.3 Indoor air quality: ≤ 500 ppm	
Project name:		De Poorters of Montfoort	
Street:		Poorterstraat 37	
Postcode/city/country:		Moontfoort, the Netherland	
Building type:		Rowhouse One Family Homes	
Year of construction:		Build in the 70ties renovated 2012	
Owner/client information		Energy	
Home owner(s) / client(s):		De Poorters of Montfoort	2.1 Energy demand: 55,0 kWh/m²
Email/phone:			2.2 Energy supply: 57,8 kWh/m²
Architect information		2.3 Primary energy: -17,3 kWh/m²	
Architect:		nn	
Company:		BouwhulpGroep	
Email/phone:			
Mechanical engineer information		Environment	
Engineer:		nn	3.1 Environmental loads: Good level
Company:		Grontmij on Active House Calculation	3.2 Freshwater: 10 % savings
Email/phone:			3.3 Sust. construction: Best level
Certification		Active House radar	
Certified by:		none	
Version: 1.04		Project	
Filename: Active House - Montfoort.xlsx			

Menu**P** **R**

Project

Project data

Comfort

Energy

Environment

Results

Save

Comfort**General information**

Number of rooms:

5

Results**Comfort**

1.1 Daylight: > 3%
 1.2 Thermal environment: best level
 1.3 Indoor air quality: ≤ 500 ppm

1.1 Daylight

Minimum daylight factor:

> 3%



Maximum sunlight:

≥ 10 % of probable sunlight hours

Daylight score:

1,5

1.2 Thermal environment

Indoor environment category:

best level

Environment

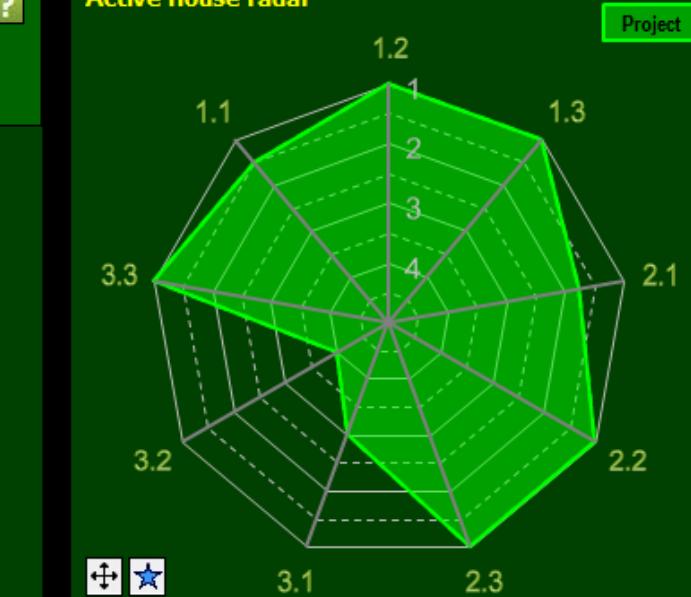
3.1 Environmental loads: Good level
 3.2 Freshwater: 10 % savings
 3.3 Sust. construction: Best level

1.3 Indoor air quality

CO2-concentration above outdoor:

≤ 500 ppm

ppm

Active House radar

Project

Menu**P R**

Project

Project data

Comfort

Energy

Environment

Results

Save

Energy**General information**

Treated floor area:

131

m²**2.1 Energy demand**

Space heating:

33

kWh/m²

Domestic hot water:

13

kWh/m²

Mechanical ventilation:

3

kWh/m²

Cooling:

0

kWh/m²

Control systems:

0

kWh/m²

Lighting:

6

kWh/m²

Total:

55

kWh/m²

Energy demand score:

1,8

2.2 Energy supply

Electricity produced by renewable energy:

18

kWh/m²

Heat produced by renewable energy:

40

kWh/m²

Total:

58

kWh/m²

Percentage of renewable energy supply:

105

%

Energy supply score:

1,0

2.3 Primary energy performance

Total:

-17

kWh/m²

Primary energy performance score:

1,0

Results**Comfort**

1.1 Daylight:

> 3%

1.2 Thermal environment:

best level

1.3 Indoor air quality:

≤ 500 ppm

Energy

2.1 Energy demand:

55,0 kWh/m²

2.2 Energy supply:

57,8 kWh/m²

2.3 Primary energy:

-17,3 kWh/m²**Environment**

3.1 Environmental loads:

Good level

3.2 Freshwater:

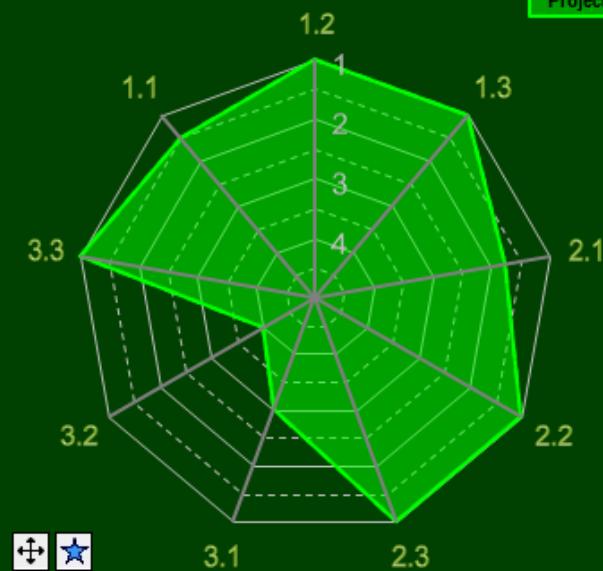
10 % savings

3.3 Sust. construction:

Best level

Active House radar

Project



Menu**P R**

Project

Project data

Comfort

Energy

Environment

Results

Save

Environment**3.1 Environmental loads**

Have you used the Active House LCA tool:

yes



PE consumption:

	loads per year	Score
PE consumption:	<150 kWh/m ²	3,0
GWP:	<40 kg CO ₂ -eq./m ²	3,0
ODP:	<6.70E-06 kg R11-eq./m ²	4,0
POCP:	<0.0070 kg C2H4-eq./m ²	3,0
AP:	<0.075 kg SO ₂ -eq./m ²	2,0
EP:	<0.0085 kg PO ₄ -eq./m ²	3,0

Envrionmental loading score:

3.2 Freshwater consumption

Minimisation of freshwater consumption:

10 %



Freshwater consumption score:

4,0

3.3 Sustainable construction**Recyclabel content**

Recyclabel content:

62 %

1,0

Responsible sourcing

Certified wood (FSC, PEFC):

100 %

Certified EMS:

100 %

Total score:

1,0

Total

Sustainable construction score:

1,0

Results**Comfort****1.1 Daylight:**

> 3%

1.2 Thermal environment:

best level

1.3 Indoor air quality:

≤ 500 ppm

Energy**2.1 Energy demand:**55,0 kWh/m²**2.2 Energy supply:**57,8 kWh/m²**2.3 Primary energy:**-17,3 kWh/m²**Environment****3.1 Environmental loads:**

Good level

3.2 Freshwater:

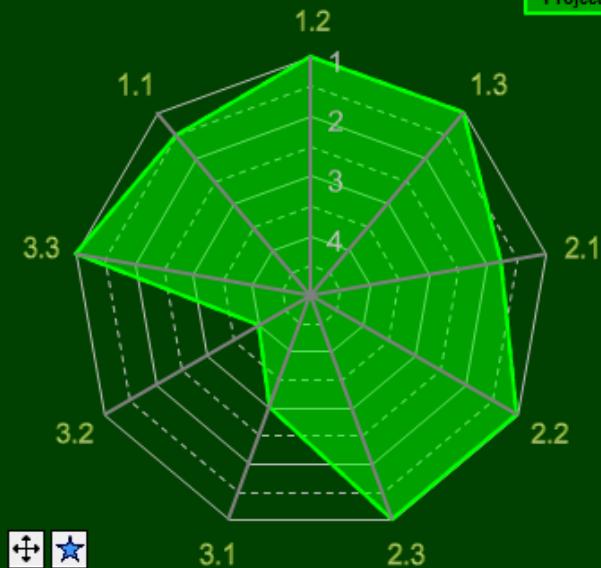
10 % savings

3.3 Sust. construction:

Best level

Active House radar

Project



Menu**P R**

Project

Project data

Comfort

Energy

Environment

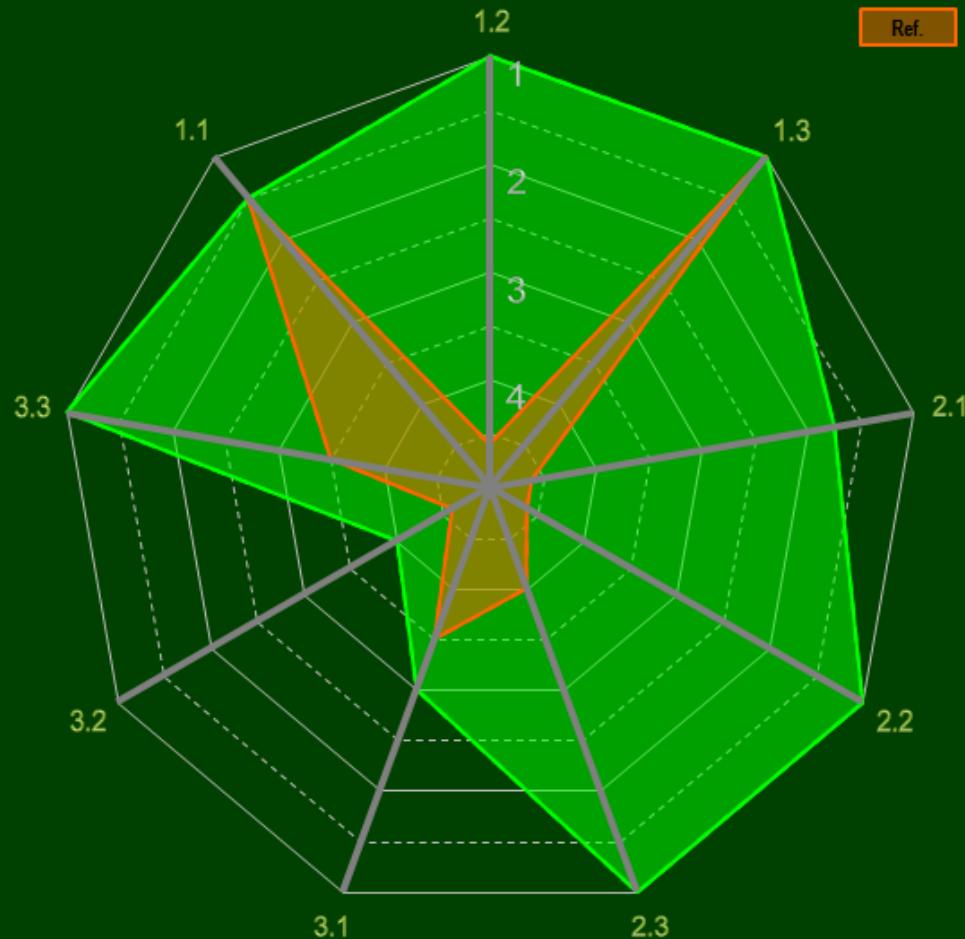
Results

Save

Radar

Project

Ref.

**Results****Comfort**

1.1 Daylight:

> 3%

1.2 Thermal environment:

best level

1.3 Indoor air quality:

≤ 500 ppm

Energy

2.1 Energy demand:

55,0 kWh/m²

2.2 Energy supply:

57,8 kWh/m²

2.3 Primary energy:

-17,3 kWh/m²**Environment**

3.1 Environmental loads:

Good level

3.2 Freshwater:

10 % savings

3.3 Sust. construction:

Best level

Contact information

Home owner(s) / client(s):

De Poorters of Montfoort

Architect:

nn

Engineer:

nn

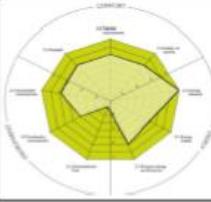
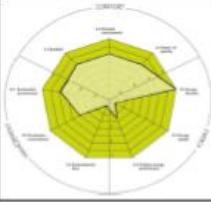
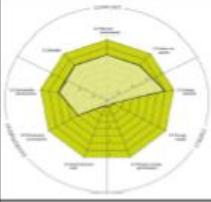
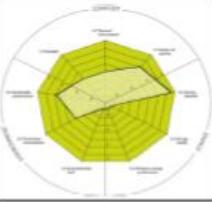
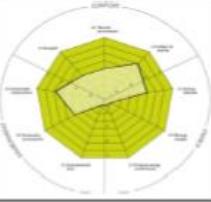
Certified by:

none

Print**Results****Project informations**

AktivHus designværktøj

- hurtig evaluering af forskellige løsninger

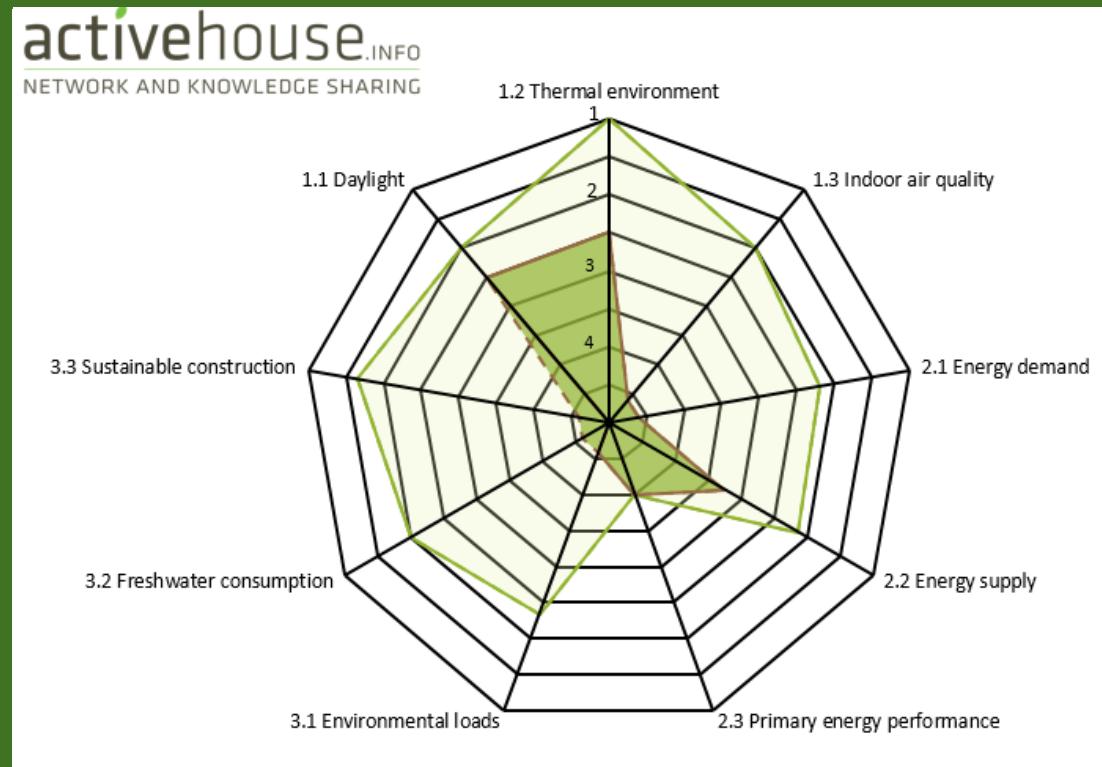
							
0: NZEB, but no focus on comfort:	1a: scenario where all renewables are produced on the plot:	1b: IXL 2015/Nearly zero energy building Flanders	1c: scenario 1b but with condens. gas boiler	2a: Low energy building connected to a district grid with C system	2b: Low energy building connected to a district grid with C+ system	3: Budget scenario	4: Scenario FA
U < 0,15 W/m²K 16cm XPS 0,035 + 5cm Isover Sonofloor 20cm EPS black 0,032 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 22cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 5 cm MW 0,035 U < 0,85 W/m²K U < 1,0 W/m²K (U < 1,0 velux 66)	U < 0,15 W/m²K 16cm XPS 0,035 + 5cm Isover Sonofloor 20cm EPS black 0,032 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 22cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 5 cm MW 0,035 U < 0,85 W/m²K (U < 1,0 velux 66)	U < 0,15 W/m²K 16cm XPS 0,035 + 5cm Isover Sonofloor 20cm EPS black 0,032 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 22cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 5 cm MW 0,035 U < 0,85 W/m²K (U < 1,0 velux 66)	U < 0,15 W/m²K 16cm XPS 0,035 + 5cm Isover Sonofloor 20cm EPS black 0,032 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 22cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 5 cm MW 0,035 U < 0,85 W/m²K (U < 1,0 velux 66)	U < 0,15 W/m²K 16cm XPS 0,035 + 5cm Isover Sonofloor 20cm EPS black 0,032 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 22cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 5 cm MW 0,035 U < 0,85 W/m²K (U < 1,0 velux 66)	U < 0,15 W/m²K 16cm XPS 0,035 + 5cm Isover Sonofloor 20cm EPS black 0,032 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 22cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 20cm MW (95%), wood (5%) + 6cm MW (90%), wood (10%) 5 cm MW 0,035 U < 0,85 W/m²K (U < 1,0 velux 66)	U < 0,24 W/m²K (floor U < 0,30 W/m²K) 6cm XPS 0,035 + impact noise insulation is required! 24 cm EPS black	U < 0,24 W/m²K (floor U < 0,30 W/m²K) 6cm XPS 0,035 + impact noise insulation is required! 24 cm EPS black
no shading n50 < 0,6	all windows, shading 50/60 n50 < 0,6	all windows, shading 50/60 n50 < 0,6	all windows, shading 50/60 n50 < 0,6	all windows, shading 50/60 no shading on East Façade n50 < 0,6	all windows, shading 50/60 no shading on East Façade n50 < 0,6	no shading n50 < 1,5	no shading n50 < 3
system D+ with heat recovery 93% geothermal heat pump Floor heating solar collector 4m² storage tank 300l	system D+ and peak NV with heat recovery 93% geothermal heat pump Floor heating solar collector 4m² storage tank 300l	system D+ and peak NV with heat recovery 93% geothermal heat pump Floor heating solar collector 4m² storage tank 300l	system D+ and peak NV with heat recovery 93% condensing gas boiler Floor heating solar collector 4m² storage tank 300l	centrif. D and peak NV with heat recovery 93% condensing gas boiler Floor heating solar collector 4m² storage tank 300l	centrif. D and peak NV with heat recovery 93% condensing gas boiler Floor heating solar collector 4m² storage tank 300l	Cx ventilation system (most advanced control system CO2 control, m = 0,5) condensing gas boiler Floor heating solar collector 4m² storage tank 300l	system D+ and peak NV with heat recovery 93% condensing gas boiler Floor heating solar collector 4m² storage tank 300l
PV panels 3,2 kWp (south, 30° inclination) no no control system VELUX Active	PV panels 2,4 kWp (south, 30° inclination) Buy green electricity VELUX Active	PV panels Buy green electricity VELUX Active	PV panels Buy green electricity VELUX Active	PV panels Buy green electricity VELUX Active	PV panels Buy green electricity VELUX Active	no PV panels Buy green electricity VELUX Active	no PV panels Standard electricity supply no control systems
yes NZEB VL 2020 2015 ok not ok from 2017 because K > 20, E0 will probably the criterion from 2019	yes NZEB VL 2020 2015 ok not ok from 2017 because K > 20, E0 will probably the criterion from 2019	no NZEB VL 2020 from 2021 not ok 2015 ok 2015 not ok	no from 2021 not ok 2015 ok 2015 not ok	no from 2018 not ok 2014 ok, 2015 not ok	no from 2018 not ok 2014 ok, 2015 not ok	no 2014 not ok (K < 35)	no not ok
13,77 < 15 D4,28 < 15	13,77 < 15 D4,28 < 15	14,28 < 15	14,28 < 15	16,3 > 15	19,95 > 16,17 (vel), (VL: 24,4)	94,7	98,3
D < 45	D < 45	38,5 < 45	42,8 < 45	60,4 > 45	70,4 > 46,4		
Difficult	Difficult	Rather difficult	Rather difficult	Rather easy	Rather difficult	Easy	Easy
- extended garden shed for solar collector - PV panels on pitched roof (OR very large garden shed, but not included in cost estimation) - no green roof - no rainwater pump	- extended garden shed for solar collector - PV panels on pitched roof (OR very large garden shed, but not included in cost estimation) - green roof - rainwater pump	- extended garden shed for solar collector - green roof - rainwater pump	- extended garden shed for solar collector - green roof - rainwater pump	- normal garden shed - green roof - rainwater pump	- normal garden shed - green roof - rainwater pump	- normal garden shed - green roof - rainwater pump	- no garden shed - no green roof - no rainwater pump
€ 193.700,00 € 30.700,00	€ 223.500,00 € 50.500,00	€ 209.500,00 € 46.500,00	€ 196.500,00 € 33.500,00	€ 182.800,00 € 19.800,00	€ 177.700,00 € 14.700,00	€ 171.300,00 € 8.300,00	€ 152.800,00 € 10.200,00
€ 188.900,00 € 25.900,00	€ 208.200,00 € 45.200,00	€ 204.300,00 € 41.300,00	€ 191.500,00 € 28.600,00	€ 178.200,00 € 15.200,00	€ 173.300,00 € 10.300,00	€ 167.000,00 € 4.000,00	€ 149.000,00 € 14.000,00
€ 164.600,00	€ 181.500,00	€ 178.500,00	€ 167.000,00	€ 155.400,00	€ 151.000,00	€ 145.500,00	€ 129.900,00
€ 1.620,00 € 0,00 € 66.000,00 € 267.200,00	€ 18.500,00 € 0,00 € 66.000,00 € 310.200,00	€ 15.100,00 € 0,00 € 66.000,00 € 305.400,00	€ 4.000,00 € 0,20 € 59.000,00 € 261.800,00	€ 7.600,00 € 0,20 € 59.000,00 € 245.800,00	€ 12.200,00 € 0,16 € 52.000,00 € 235.400,00	€ 17.400,00 € 0,16 € 52.000,00 € 230.700,00	€ 33.100,00 € 0,16 € 52.000,00 € 230.700,00



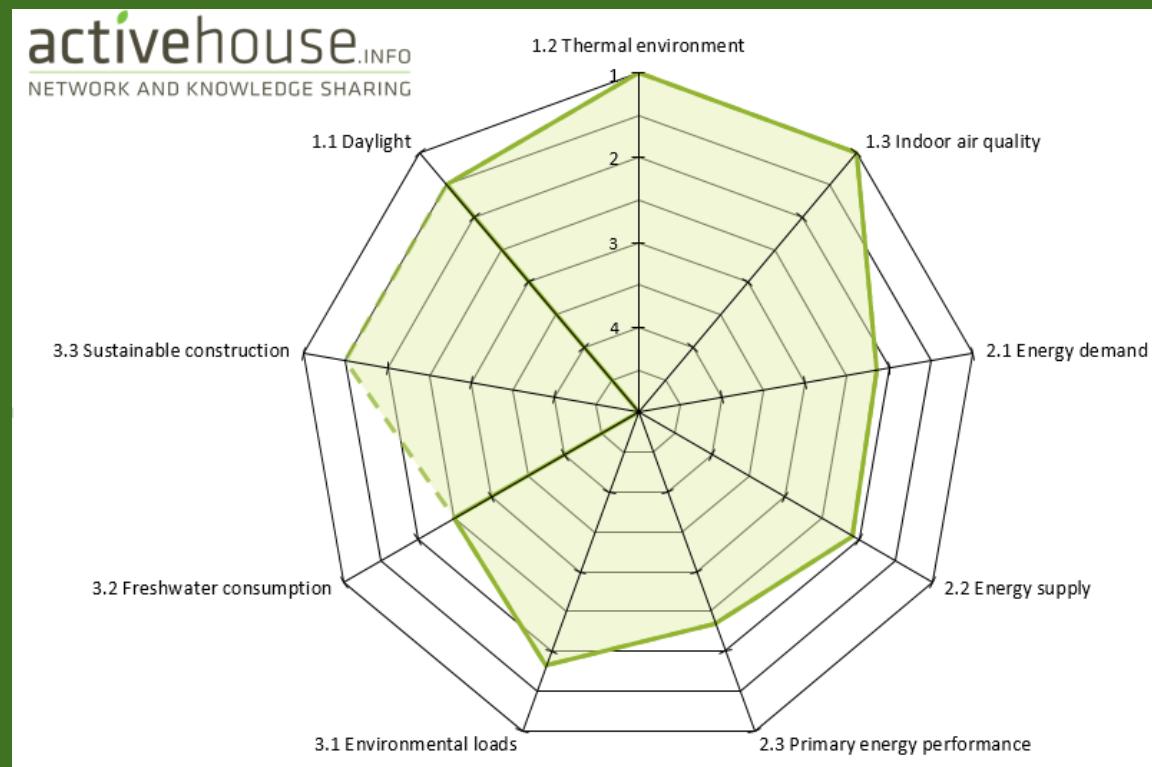
Cirkulær Bæredygtighed



Green Solution House, Bornholm - Smart Room hotelværelser Renovering



Green Solution House, Bornholm – Konference afdelingen Nybyggeri

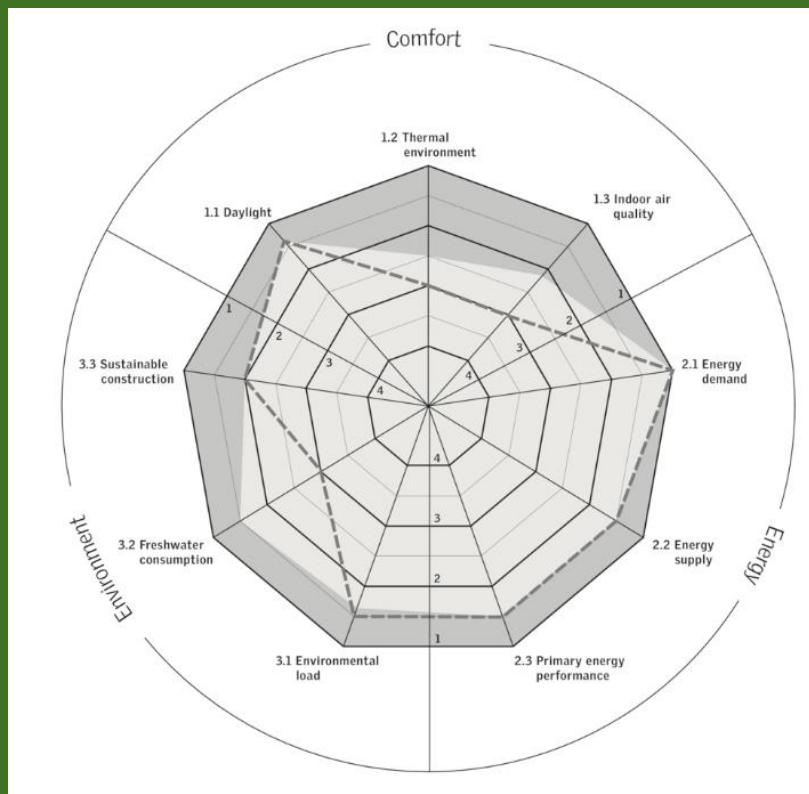


Bolig for Livet, Lystrup ved Århus



www.activehouse.info/cases/home-life

Nybyggeri - Bolig for Livet i Lystrup ved Århus



Osram Kulturhus, København



www.activehouse.info/cases/osram-culture-centre

Renovering – Osram Kulturhus, København N



KFS – BOLIGBYG

Lang Freddal 15, Sabro (v. Århus)

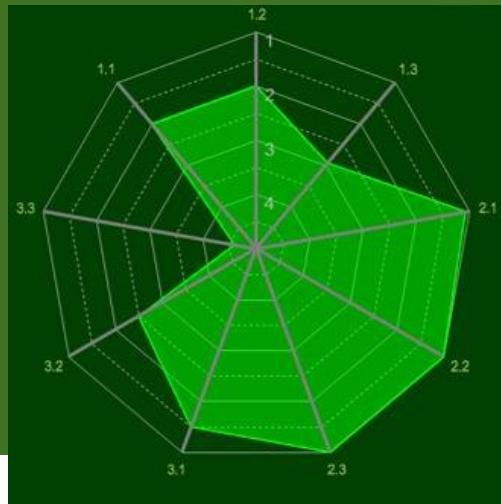


AktivHus eksempler

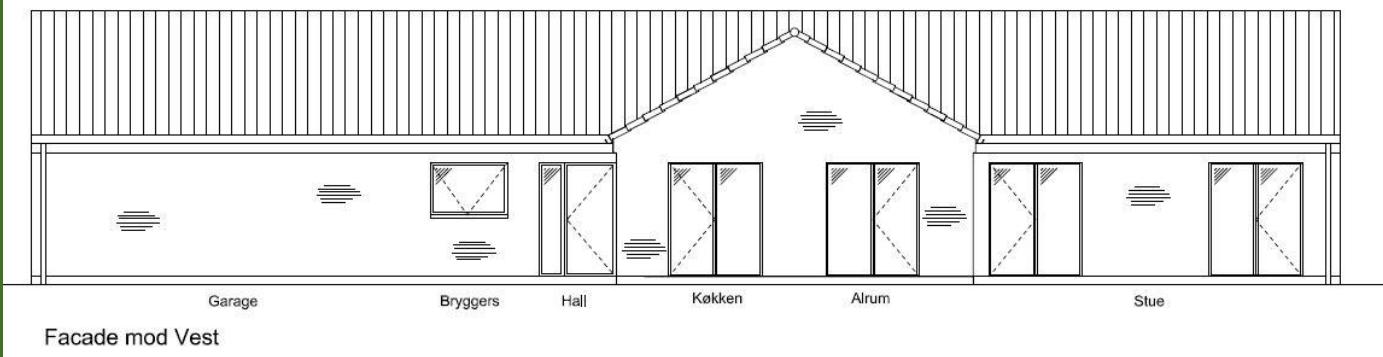
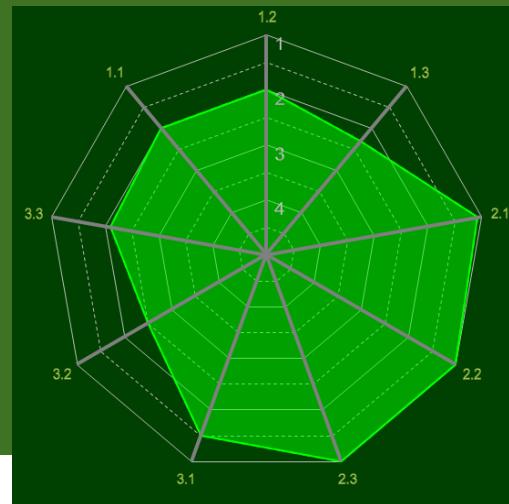
KFS – BOLIGBYG

Lang Freddal 15, Sabro (v. Århus)

Før...



VED FORBEDRING ...

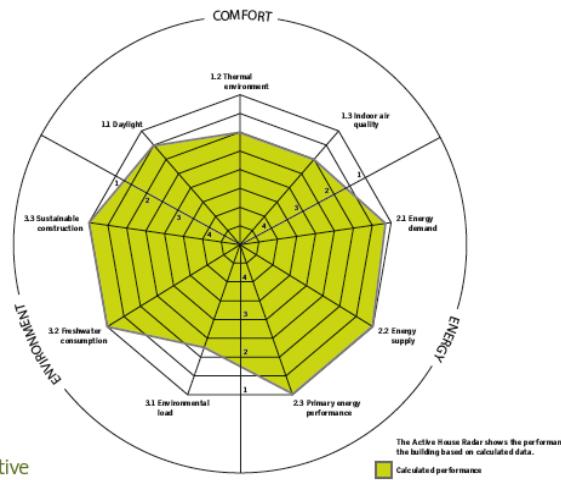


RhOME

– a home for Rome

Developer: UNIVERSITY OF ROMA TRE
 Department of Architecture, Italy
 Architect: Designed by students from the university in 2014
 Location: Participated in Solar Decathlon 2014 in Paris

The RhOME project was the winner of the Solar Decathlon competition in Paris 2014. It was designed as a modernisation case and a roof-top renovation project. The intention was to describe architectural features and technological innovations in a roof-top renovation that could not be obtained in a common floor or in the ground floor. The project was designed based on the Active House criterias, optimising thermal and luminous comfort and at the same time minimising energy consumption.





ACTIVE HOUSE - the guidelines

Comfort
Energy
Environment

the guidelines

Næste aktiviteter

Lancering af nyt beregningsværktøj 23.3

Lancering af guideline 23.3

Åbent hus KFS Boligbyg på Byg og Bo i påskken

Seminar i bæredygtigt byggeri maj 2015

Healthy Building Conference Holland 18-19.5

AKTIVPlus symposium Tyskland 21.5

European Sustainable Energy Week – 16.6

Kurser efter behov

Bliv medlem!

Arkitekter, Ingeniører, Konstruktører,
Typehusfirmaer, Entreprenører,
Håndværkere, Bygherrer,
Byggematerialeproducenter, etc.