



## *ENERGY AGENCIES OF SWEDEN*

### *SWEDEN – BUILD UP Skills SWEBUILD*

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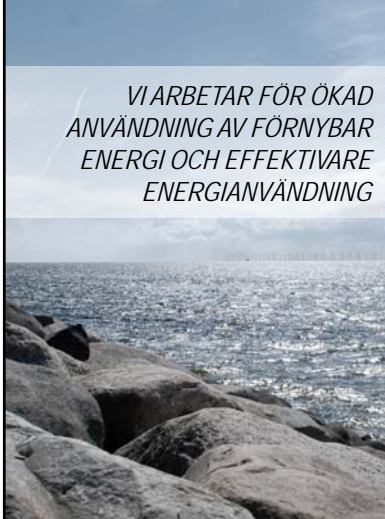
16 March 2015 Lund  
Per-Johan Wik



#### *DEN REGIONALA KRAFTEN I ENERGIOMSTÄLLNINGEN*

- *Collaboration body*
- *14 regional energy agencies in Sweden*
- *450 energy agencies in Europe*





VI ARBETAR FÖR ÖKAD  
ANVÄNDNING AV FÖRNYBAR  
ENERGI OCH EFFEKTIVARE  
ENERGIANVÄNDNING

- 
- **Pre studies**
  - **Project management**
  - **Education**
  - **Coordination**
- 



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## BUILD UP Skills SWEBUILD

### EU-directive background to BUILD Up Skills initiative:

- Energy Performance Buildings Directive (EPBD):
  - New buildings owned and used by public authorities shall be nearly zero energy buildings from 1 January 2019.
  - All new buildings shall be nearly zero energy buildings from 1 January 2021.
  - Also when larger retrofitting projects are taking place, low energy use shall be taken into consideration.
- This is the reason why the EC finance projects with aim to increase craftsmens competence in building low-energy buildings.



## BUILD UP Skills SWEBUILD

### BUILD Up Skills 1:

- 30 countries in Europe.
- Coordinated by Swedish Energy Agency
  - Between 2011-2013
  - Sveriges Byggindustrier (builders association), Byggnads (builders trade union), NCC, VVS Företagen (plumbers association), WSP (consultancy company), Energikontoren Sverige och SP (Swedish research institute) .
- Aim: Roadmap for increasing the of competence for craftsmen employed at the construction site (builders, installers, their management, etc.)

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Skåne  
16 March 2015



## BUILD UP Skills SWEBUILD

### BUILD Up Skills 1, a wide reference group:

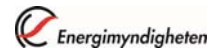
Bebo (WSP)	SABO
BELOK (CIT Energy management)	SBUF
BFAB/STF Ingenjörsutbildning	SEK, Svensk elstandard
Boverket	Skolverket
Byggnadsindustrins Yrkesnämnd, BYN	Svenska Teknik&Designföretagen
EIO, Elektriska Installatörs Organisationen	Sweden Green Building Council (SGBC)
Fastighetsägarna	Swedisol / Paroc
IQ samhällsbyggnad	Svensk Ventilation
Jobblotsen Sverige AB	Sveriges kommuner och landsting, SKL
Sveriges Skorstensfejmästares riksförbund	Trä och möbelföretagen, TMF,
KYH	Unionen
Ledarna	VVS-branschens yrkesnämnd
Passivhuscentrum	

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## BUILD UP Skills SWEBUILD

### Result BUSS I:

- A need and will for capacity building.
- No certain obstacles identified for capacity building.
- The education should consist of a general part with a follow up.
  - General – in connection with the work site.
  - Follow up – for a specific project, for different categories of craftsmen
- Important to learn how my work influence others

[About the same results in Norway and Estonia](#)



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## BUILD UP Skills SWEBUILD

### Result BUSS I:

Requested capacity building:

- General knowledge about low-energy buildings.
- Energy efficient building shells
- Air-tightness
- Thermal bridges
- Insulation and insulation materials
- Installation techniques and recycling techniques
  - Heating systems
  - Hot tap water systems
  - Ventilation systems
- Correct calibration of installations

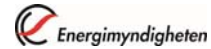


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## BUILD UP Skills SWEBUILD

### BUILD UP Skills 2 :

- Energy Agencies of Sweden got the assignment from Swedish Energy Agency to coordinate the next phase of the Build Up Skills project – BUILD UP Skills SWEBUILD.
- Sveriges Byggindustrier (builders association), VVS-Företagen (plumbers association), Elektriska Installatörsorganisationen (electricians association), SP (Swedish research institute), Passivhuscentrum (low-energy buildings specialist), WSP (consultancy company), Teknologisk Institut (educational company) och NCC (construction company).

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## BUILD UP Skills SWEBUILD

### BUILD UP Skills 2 :

- In total 22 countries in EU are currently running their Build Up Skills 2-projects
- 4 more to start 2015

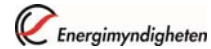
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## BUILD UP Skills SWEBUILD

### BUILD UP Skills 2 :

- Sweden's project SWEBUILD is running between 2014-2017. EU 75% financing , Swedish Energy Agency 25% financing. In totalt ca 2m€.
- The aim of SWEBUILD is to carry out parts of the Roadmap put forward in BUILD UP Skills 1.
- Main objective: To train 500 supervisors in low-energy building techniques, that in turn will educate craftsmen on site.

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## BUILD UP Skills SWEBUILD

### Letter of Support:

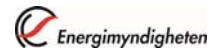
Energimyndigheten	Yrkehögskolan KYH
BeBo	Sveriges Centrum för Nollenergihus
Belok	Svensk Ventilation
BFAB	VentCentrum
Byggmaterialindustrierna	The Danish Construction Association
Byggherrarna	Glasbranschföreningen
Boverket	Swedisol
Byggnadsindustrierna yrkesnämnd	Skanska

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## BUILD UP Skills SWEBUILD

### WP2 – Marketing and educational concept:

- Analyses about expectations of already gained experiences regarding training for energy efficient building techniques.
- Awareness raising – organisations and members.
- Development of structures for the establishment of life long learning.
- Prepare and support the implementation of life long learning.

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## BUILD UP Skills SWEBUILD

### WP3 – Education material:

- Analyses of existing education material, for example Bygga-Bo-Dialogen, passivhusbyggare.
- Development of learning techniques and courses curriculum for educational purposes and just in time installation instructions, e.g. viscosity of air, heat recovery ventilation, etc.
- Development of easy and self-instructing educational material.
- Routines for updating the material

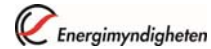
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## BUILD UP Skills SWEBUILD

### Present situation SWEBUILD:

- In collaboration with stakeholders in the building sector put together a concept for capacity building actions.
- Identify how we can reach out to the most important stakeholders in the process.
- Collaborate as much as possible with the building sector.
- Create a common understanding for the problem to be solved, for different categories of craftsmen.

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## BUILD UP Skills SWEBUILD

### Near future SWEBUILD:

- Involve all steps in the building process.
- Find the optimal solution for capacity building, meaning training craftsmen at the work sites.
- Make sure the educational actions receive high recognition so it will continue after the project period.
- Identify how the actions will continue after project end 2017.

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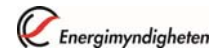
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## BUILD UP Skills SWEBUILD

**Thank you**

<http://energikontorensverige.se/vara-projekt/build-up-skills-swebuild/>

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16 March 2015

