

Information to consumers – the Swedish example

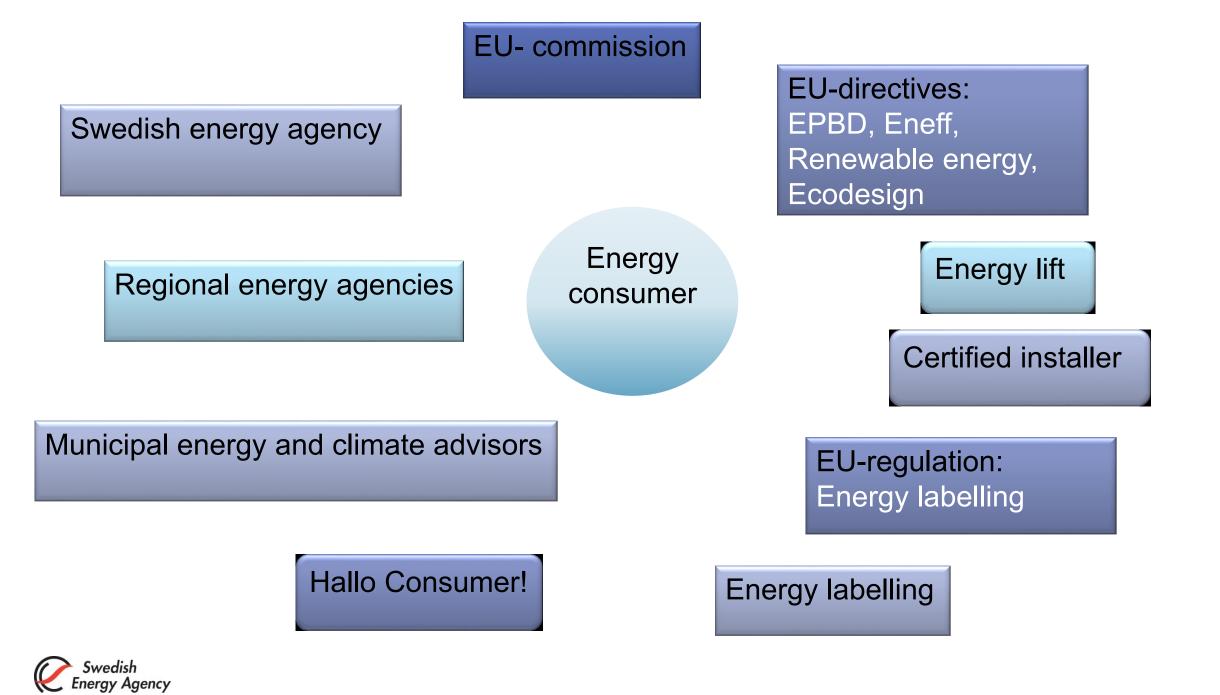
Liv Balkmar liv.balkmar@energimyndigheten.se Swedish energy agency EU- Commission workshop October 19th 2017



### Swedish energy agency

- Commissioned by the government
- About 350 employees
- Different departments: Analysis, Research and innovation, Energy efficiency, Renewable energy and Climate
- Several energy efficiency programmes towards SME are run through The European regional development fund





# Municipal energy and climate consulting

Energy and climate advisors in 284 of 290 municipalities (since 1998)

Target groups: Households, organisations and companies (SME)

Advisors should deliver impartial energy advice of local and regional basis, comercially independent and free of charge

Education provided by Swedish energy agency





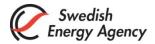
# **Regional agencies**

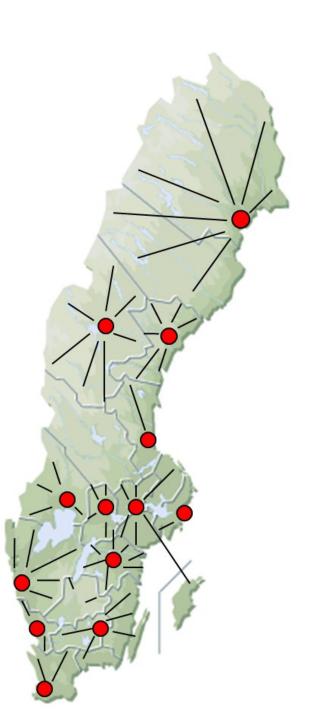
All energy and climate advisors are organised in a network of 15 regional energy agencies

Both the regional energy agencies and the local energy and climate advisors partly financed by the Swedish energy agency

National funding about 12,5 Million Euro

Part in EPBD



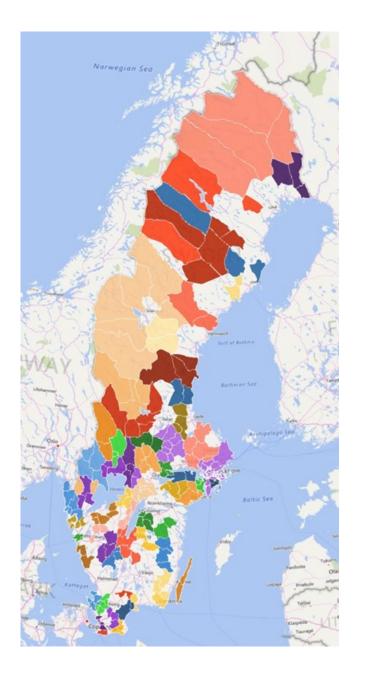


# Framework of the local energy and climate advisors

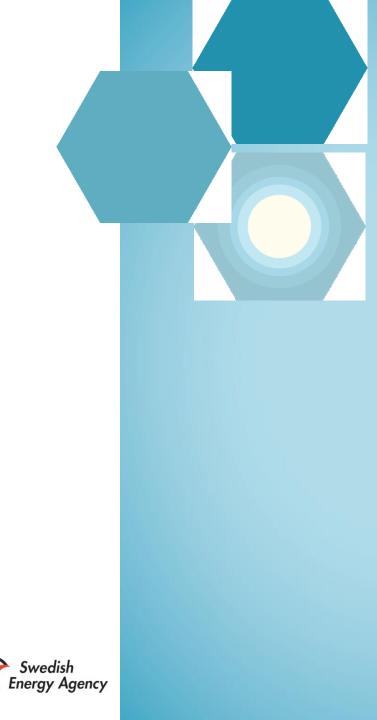
75 % of the municipalities are organised in cooperation with communes nearby

New regulation from 2016 to develop the consulting with better common methods, national achievements or campaigns and better monitoring to obtain higher and more consistent quality

At least 50 % of advisors engagement must represent work related to this errand







## Governmental mandate

- Concerning nearly-zero energy buildings in cooperation with "Boverket" (Swedish agency for building and planning)
- EPBD Energy Performance of Buildings Directive (EU 2010)
- Aiming to sustainable and resource effective energy supply in 2050
- Measurement and demonstration of new low-energy buildings
- Skills enhancing efforts (education program) for nearly-zero energy buildings

# This is the Energy Codend

- an interactive web-based education in low-energy buildings



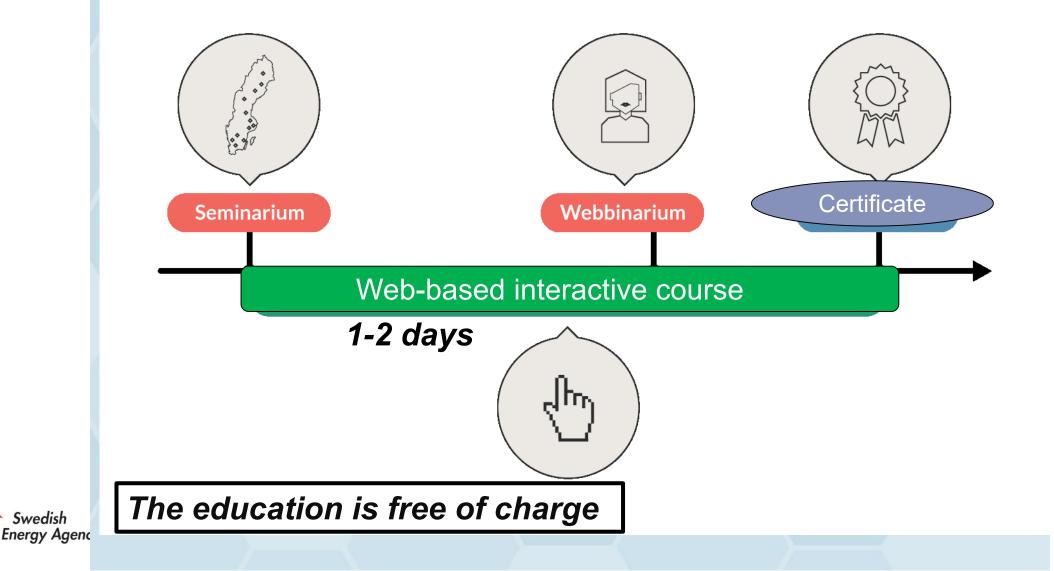
Clients, engineers, architects, construction project managers, technical managers and EKR



The Energy Codend raises your basic competence in low energy buildings. You also get an insight into other roles than your own in the construction process.



#### Education program The Energy Codend



#### Ten training parts



#### Environmental objectives and driving

forces What is a low-energy building? Why do we build low-energy buildings?



System boundaries What system limits are available and how are they used?



Roles and responsibilities in the construction process How can overall vision and quality assurance be created in the construction process?



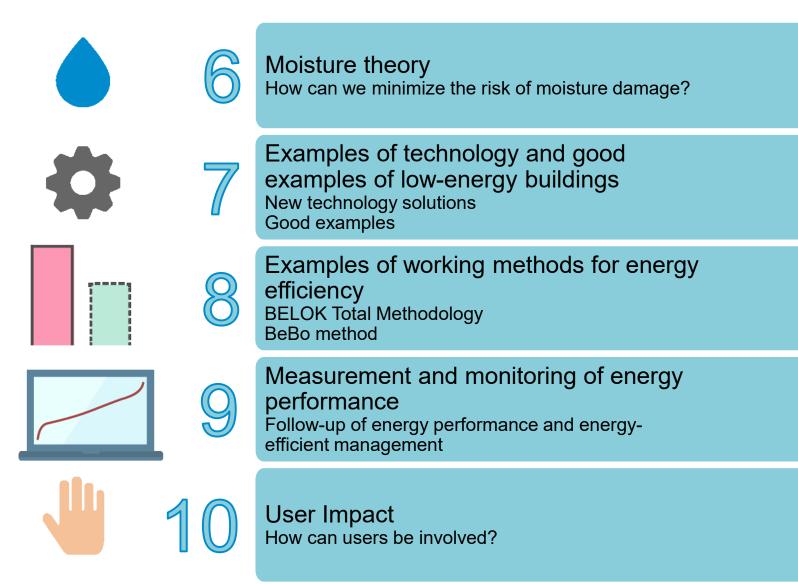
Economic bases for low-energy buildings Different economic methods New construction and remodeling Real Estate Valuation



Planning of low-energy buildings Building energy balance Planning of new buildings Energy Renovation Energy Simulation



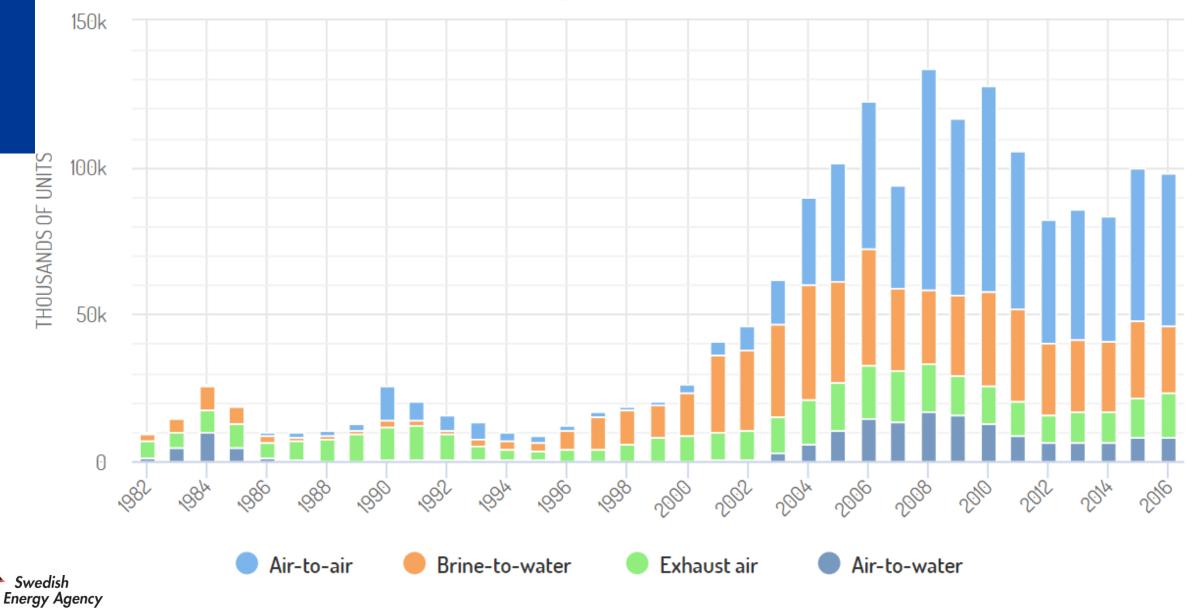
#### Ten training parts





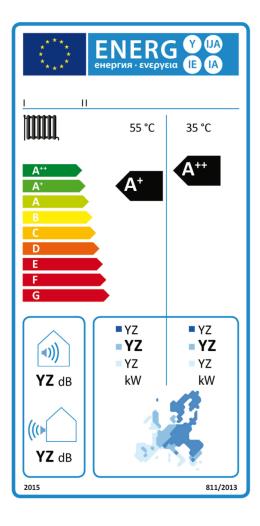
#### HEAT PUMP SALES IN SWEDEN 1982-2016

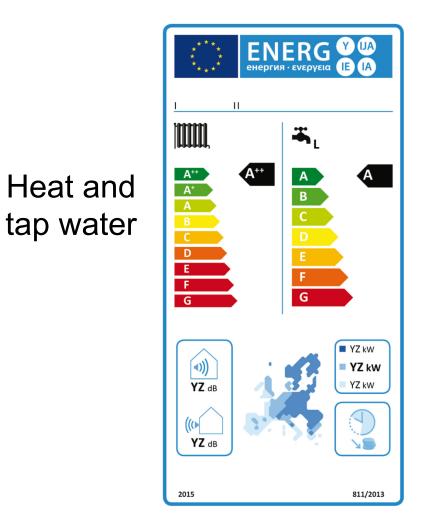
Source: Swedish Refrigeration & Heat Pump Association

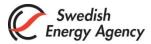


# Energy labelling for heat pumps - Water-borne heat

Heat High and low temperature



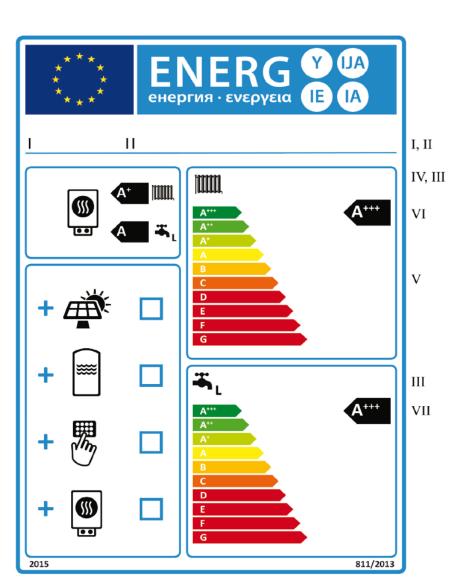




# Energy labelling for energy systems

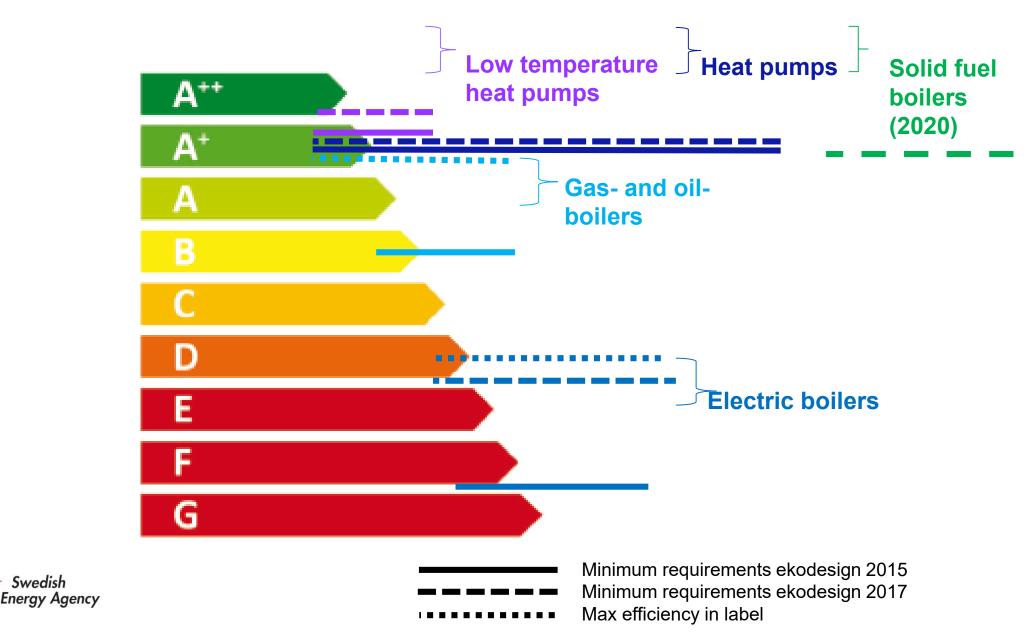
(boiler, heat pump, temperature regulator and solar heating equipment)

- A new role for retailers and installers
- Applies to combinations of boiler / heat pump and temperature control and / or solar heating equipment
- Shows energy efficiency for a combination of products
- Also available for the combination of water heater + solar heating





### Energy classes for room heating 2015-2019



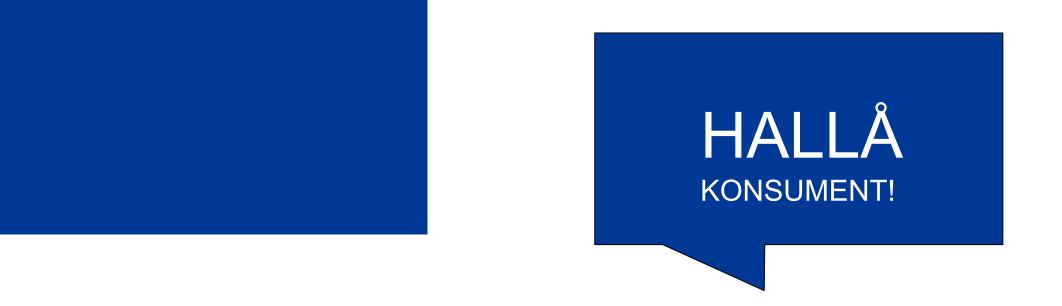
Swedish

# Certified installers for heat pumps



- Also for solarpanels (photovoltaics and solar heating) and bioenergy installation
- Certification is voluntary
- Higher competence of installers
- Improved trademark
- Consumers/customers get better confidence for installer
- Verified by governmental accreditor





- National information service for consumer issues
- Coordinated by the Swedish consumer agency
- Advice on energy saving and sustainability
- Link to municipal energy and climate advisors



# Thank you!

