



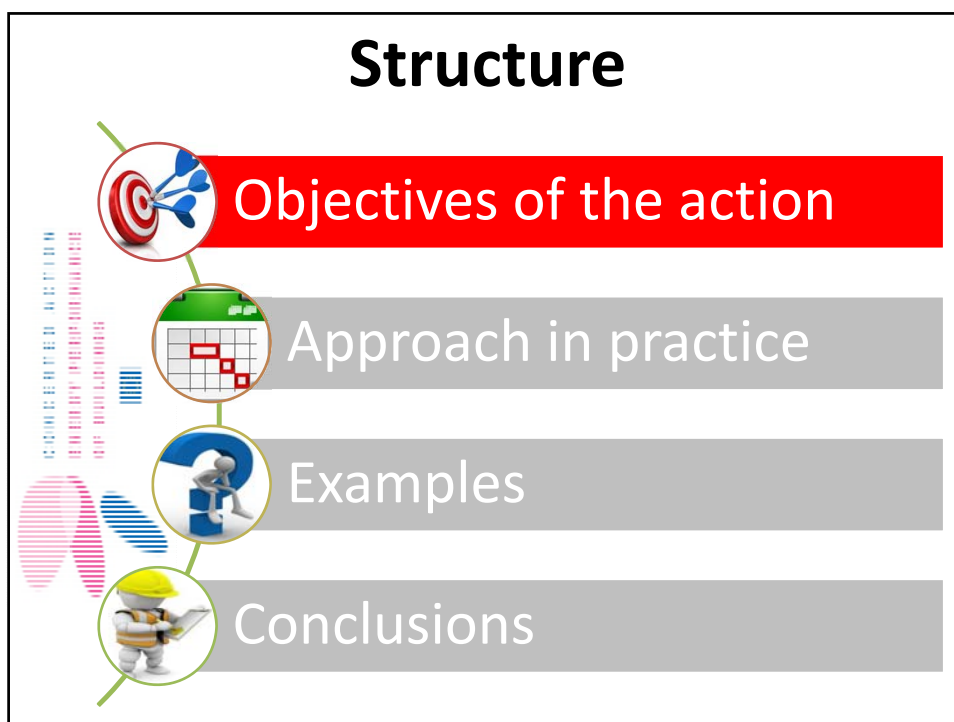



Interaction between EPBD Concerted Action and BUILD UP Skills

Peter Wouters
Belgian Building Research Institute

Structure

-  Objectives of the action
-  Approach in practice
-  Examples
-  Conclusions

Objectives of the action

The proposed activity aims to meet the following objectives:

1. **Support dialogue** between the competent authorities implementing the EPBD and the BUILD Up Skills Consortia
2. **Encourage discussions** about mismatches (if any) in legislative implementation and skills development
3. Ensure that **EPBD recast implementing measures and their timing are accounted for in BUILD UP Skills**
→ status-quo and roadmaps
4. **Collect interesting examples of BUILD UP Skills** roadmap measures which facilitate EPBD implementation
5. **Share interesting examples of EPBD recast implementation** linked to qualification measures for the on-site workforce
6. Evaluate if, and how, the **buildings related aspects of the Energy Efficiency Directive** have implications for skills development of the on-site workforce

EPBD Article 8.1

Technical building installations

Member States shall, for the purpose of optimising the energy use of technical building systems, **set system requirements** in respect of

- the overall energy performance,
- **the proper installation,**
- **the appropriate dimensioning, adjustment and control of the technical building systems**

which are installed in **existing buildings**.

Member States may also apply these system requirements to **new buildings**.

EPBD Article 27 Penalties

- Member States shall lay down the rules on penalties applicable to infringements of the national provisions (...).
- The **penalties** provided for must be **effective**, **proportionate** and **dissuasive**.

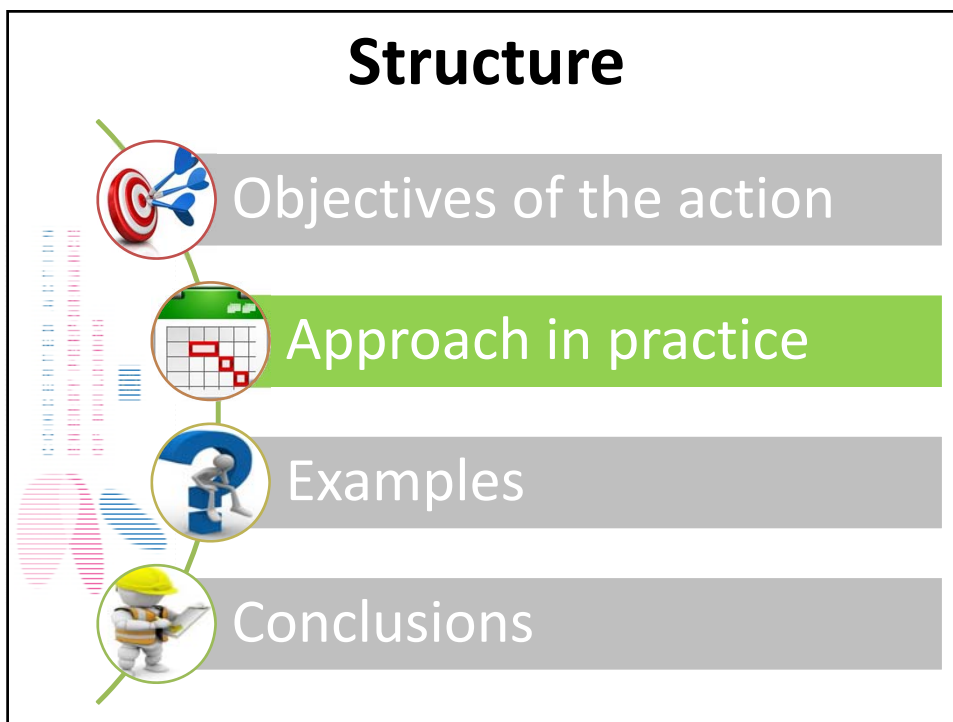
EED article 4

Member States shall establish a long-term strategy for mobilizing investment in the renovation of the national stock of residential and commercial buildings, both public and private.

This strategy shall encompass:

- An overview of the national building stock based, as appropriate, on statistical sampling;
- an identification of cost effective approaches to renovations relevant to the building type and climatic zone;
- **policies and measures to stimulate cost-effective deep renovations of buildings, including staged deep renovations;**
- a forward looking perspective to **guide investment decisions** of individuals, the construction industry and financial institutions;

Structure





Approach in practice


SEP	OCT	NOC	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AU	SEP	OCT
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	-----	-----

↓

Decision by EPBD-CA management team to start the action

Setting up of **working group** with as members:

- M. Antinucci (Italy),
- S. Geissler (Austria),
- M. Papaglastra (Greece),
- P. Wouters (Belgium)



Approach in practice

SEP	OCT	NOC	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AU	SEP	OCT
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	-----	-----

↓

Preparation phase

- In collaboration with EACI
- Identification of national EPBD-CA contact persons (with budget)


 Approach in practice

SEP	OCT	NOC	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AU	SEP	OCT
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	-----	-----

↓

BUILD UP Skills plenary meeting Brussels




 Approach in practice


SEP	OCT	NOC	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AU	SEP	OCT
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	-----	-----

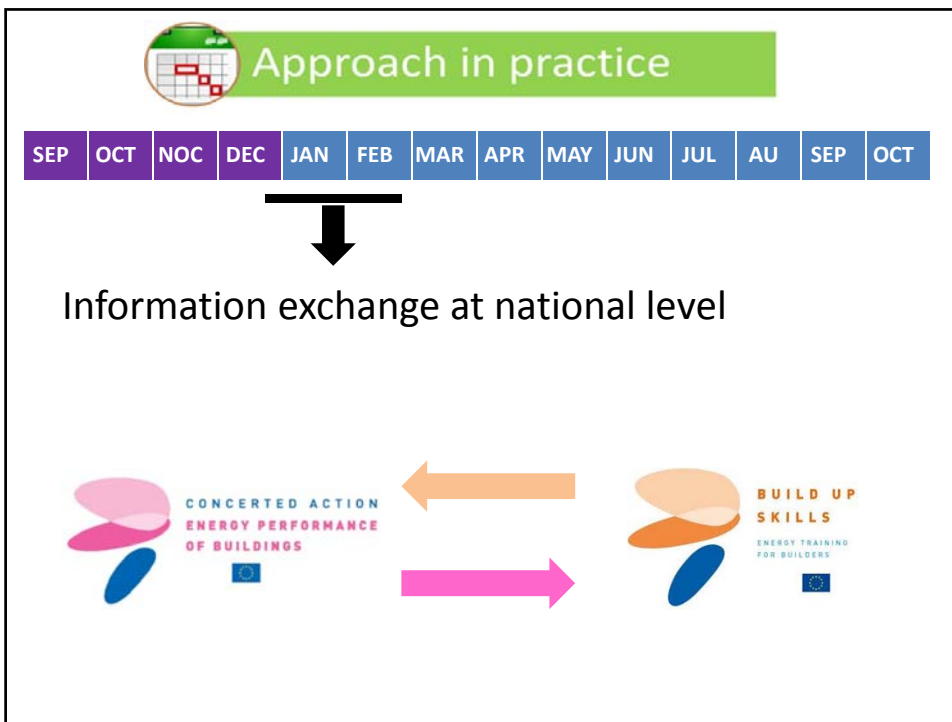
↓

Information sessions (by internet) for national EPBD-CA contact persons:

- December 6
- December 11







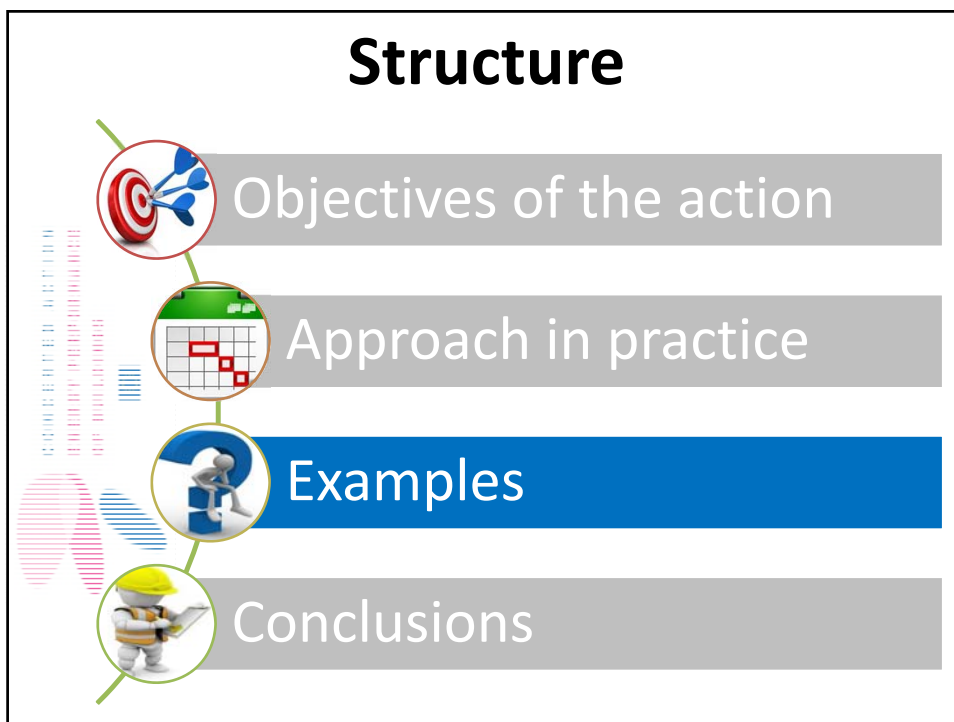
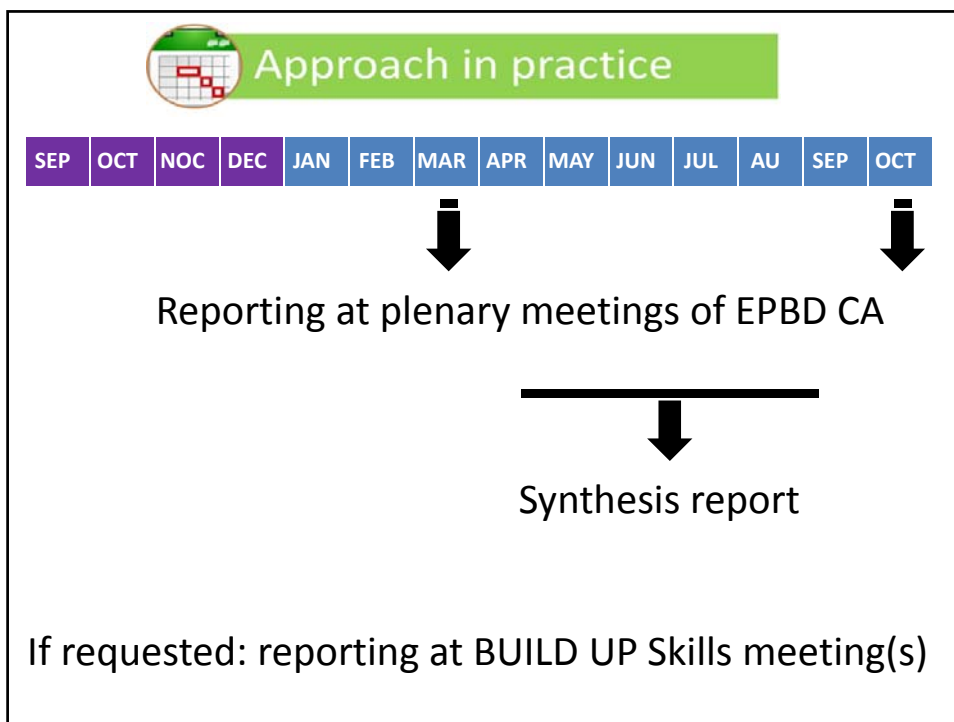
Information exchange at national level

Belgian approach?

We will organise a meeting in January between all Belgian participants from:

- RES Concerted Action
- EPBD Concerted Action
- BUILD UP Skills







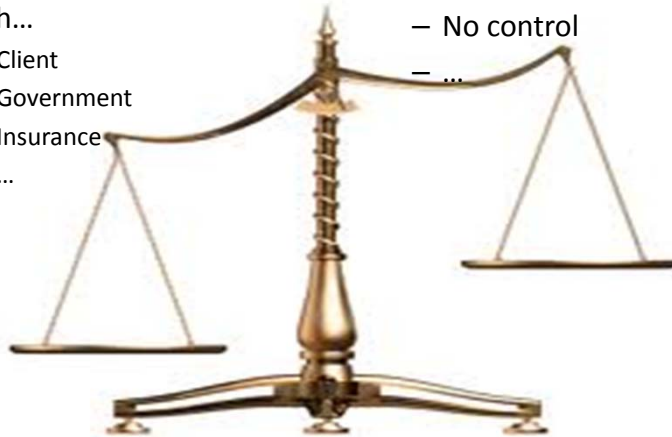
Quality of the works if well trained...

On the one hand...

- Client satisfaction
- Limitation of liability
- (Perceived) Risk of problems with...
 - Client
 - Government
 - Insurance
 - ...

On the other hand...

- Profit
- Very strong competition?
- No clear quality targets?
- No control
- ...



Quality of the works if well trained...

On the one hand...

- Client satisfaction
- Limitation of liability
- (Perceived) Risk of problems from...
 - Client
 - Government
 - Insurance
 - ...

On the other hand...

- Profit
- Very strong Competition?
- No clear quality targets?
- No control
- ...



Examples



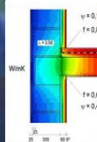
Ductwork airtightness



Building airtightness



Insulation of existing cavity walls



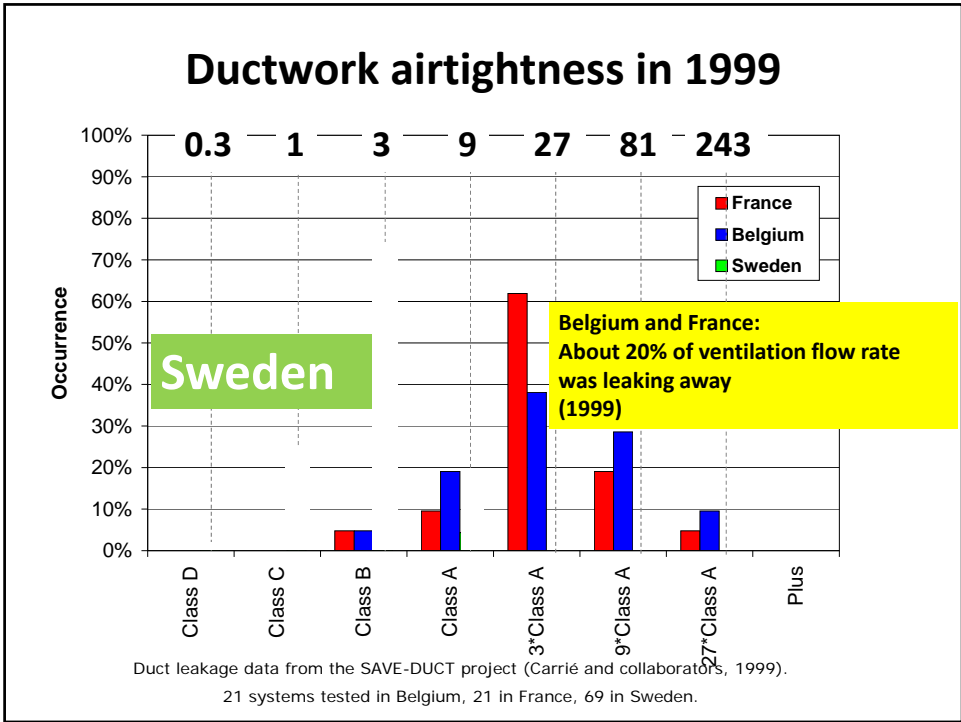
Thermal bridges

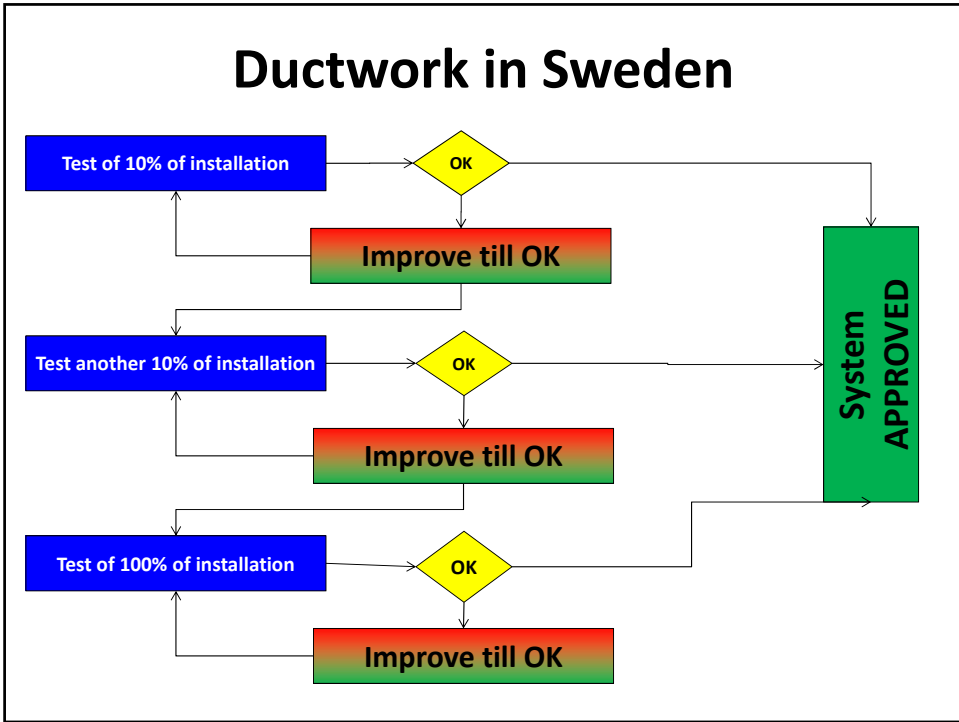


Ventilation systems



PV systems



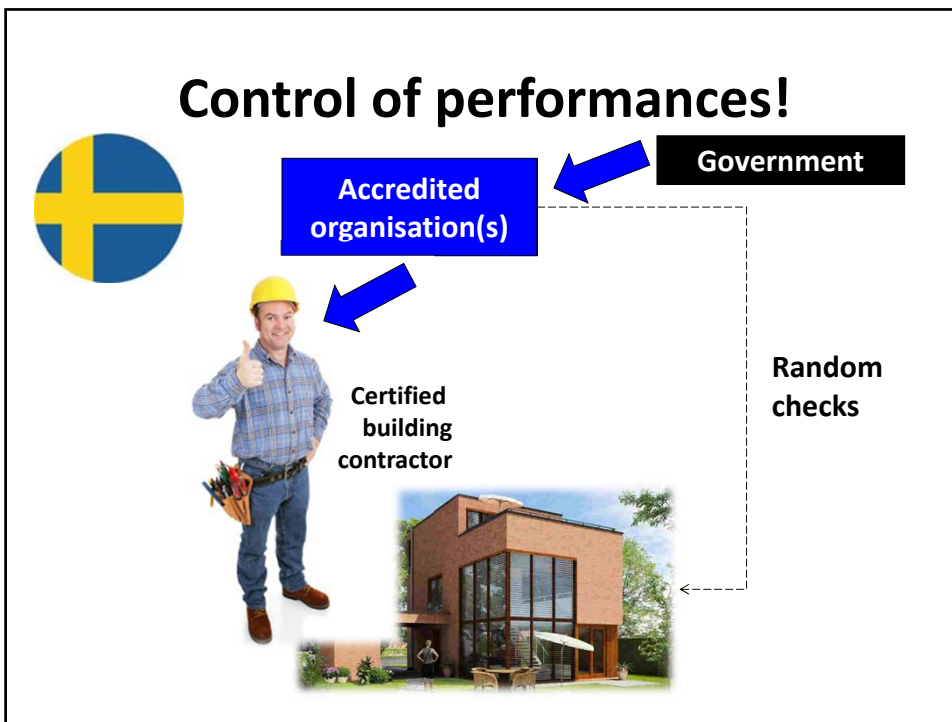



Control of performances!

Government


Assessment by a civil servant

The slide features three images: a civil servant in a blue uniform and cap holding a clipboard, a stack of Euro banknotes (50, 100, 200, 500), and a modern brick building with large glass windows.







Insulation of existing cavity walls



UK approach

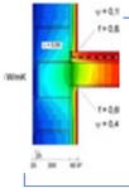
- Cavity Insulation Guarantee Agency
- Several million dwellings







Belgian approach

- Neutral document with technical specifications
- Quality requirement in context Flemish subsidies



Thermal bridges





Belgium


France

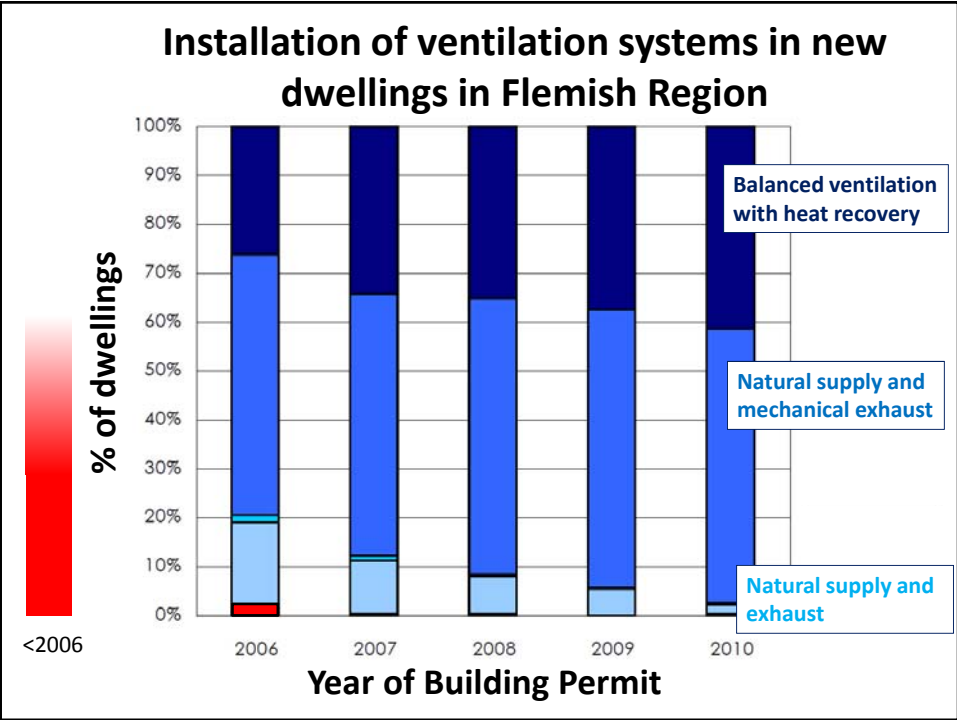
Germany

Netherlands

...

Interesting EPBD related approaches...







Market of air distribution systems heavily depends on societal view on awareness on quality and compliance

Sweden:

Building law requiring ventilation control

- **1991:** compulsory system for ventilation control (OVK)
 - Aim: control and improve function of ventilation installations
 - Ventilation in most types of buildings has to be controlled
 - before the installations are taken in to operation and
 - then regularly at recurrent inspections.
- According Swedish environmental legislation:
 - In **2020** all buildings shall be healthy & good indoor environment
- One of intermediate goals :
 - “all buildings where people stay often or during a longer time shall **2015** at the latest have been proven to have a functioning ventilation system”.

AIVC Brussels 2012 - Johnny Andersson (Ramboll)



PV systems

Heavy storms in Belgium January 2012

- 3 January:
 - Middelkerke, 104 km/h - Uccle (94 km/h) - Deurne (90 km/h).
- 5 January:
 - Gembloux 122 km/h - Wavre 108 km/h - Koksijde 101 km/h.

9 Beauforts - Return rate of 3 years

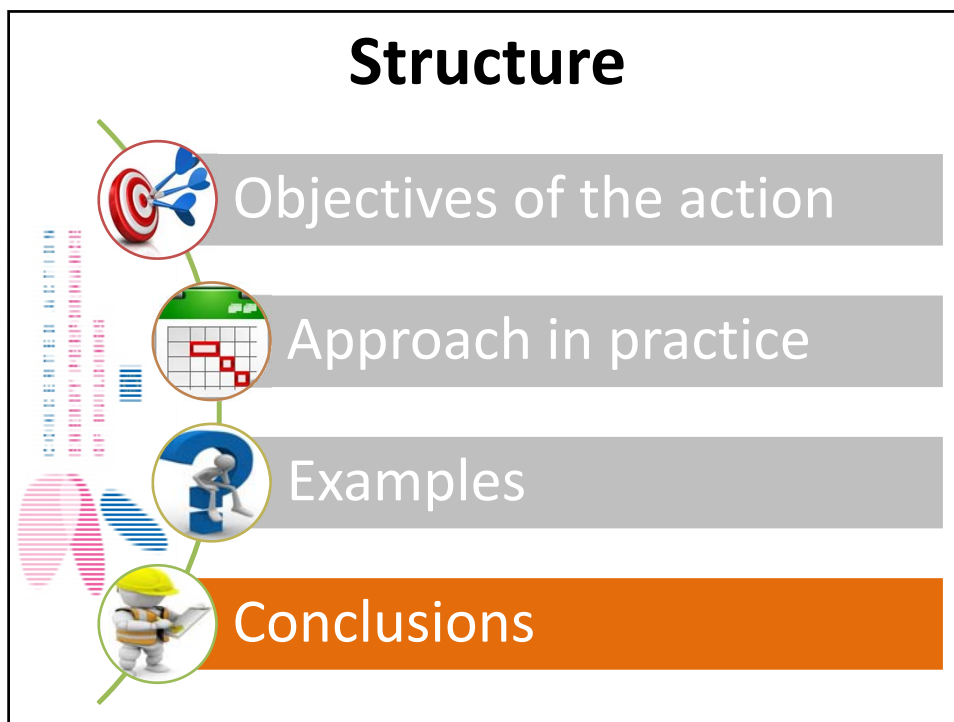


PV systems

Results for 1 insurance company

- 5% of installations with insurance were damaged
- 700.000 € of damage
- More than 100 installers were involved





Conclusions

- Good quality of the works is essential but not an evidence!
- This activity aims to optimise interaction between BUILD UP Skills related activities and the EPBD Concerted Action