DEEP ENERGY RENOVATION AND ONE-STOP-SHOP SOLUTIONS
FOR PRIVATE HOME OWNERS

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About the project

• Inspire homeowners to carry out deep energy renovations
• Achieve 50-80% reduction in energy use
• Easy, economical and efficient
• Bridging demand and supply side
• One-Stop-Shop
About the project

- Focus on ‘deep renovation’
- Push the market of energy renovation in existing buildings even further
- The project builds on existing knowledge and best practice
- Is funded with 2 mio. € by Horizon2020
13 partners in 6 EU countries

- Local authorities
- Local companies
- Knowledge institutions

From Belgium, the Netherlands, Germany, Slovenia, Estonia, Denmark
Drivers and barriers for deep renovation

Depend on

- The dweller (income, age, family pattern, young family, empty nesters, convinced energy savers, just moved in)

- The dwelling (type, condition, energy bill)
Drivers & barriers in different stages of the decision making process

Barriers:
- Moving soon
- Renting
- Unsure if insulation is needed
- Monument conservation
- Need to agree with neighbours
- No money available
- Not the right time yet
- Insulation is in good conditions
- Information from officials not trustworthy
- Unsure about information about insulation
- Payback time too long
- Contractors are inexperienced

Facilitators:
- Easily accessible information available
- Increased quality of the house
- More comfort
- House is better to live in
- Upgrading insulation is common in neighbourhood
- Increased value of the house
- Reduced energy costs

Source: Christian A. Klöckner, NTNU, Norway, 2013
Technical drivers and barriers

Technical drivers and barriers are linked with the dwelling characteristics and the challenge to renovate to NZEB.

DRIVERS:
Urgency for renovation & lock-ins
Availability of tailormade stepwise approach for NZEB-renovation
Inconveniences and defects in the house

BARRIERS:
Inconvenience linked to the renovation
Technical possibilities
Financial drivers and barriers

Financial drivers and barriers are linked with the financial possibilities of the dweller and the cost of the NZEB-renovation.

DRIVERS:
Subsidies, financial incentives, etc.
Energy bill
Return on investment

BARRIERS:
Feel secure about investment
Cost for NZEB-renovation

BOTH:
Availability of financial possibilities to invest
Willingness to invest in energy efficiency / competing products
Social and behavioural drivers and barriers are linked with the decision making process of the dweller.

DRIVERS:
- Renovation needs & intentions: increase comfort level, cosiness, personalization, taste, adjust architectural concept...
- Advice, unburdening & guidance
- Awareness of energy saving potential
- Accurate, reliable & tailor-made information
- General knowledge level
- Neighbourhood action, group action

BARRIERS:
- Decision making, self-reliance & empowerment

BOTH:
- Momentums for renovation (why now?)
- Availability of time to manage renovation project
DEMAND      SUPPLY

• Bridging demand and supply side
• Mapping of the supply side
• Mapping all the different technical solutions that fit consumer needs

One-stop-shop concept
One-stop-shop concept

Holistic approach to the renovation process by combining technology combinations and improved communication between the house-owner and the supplier

• Local partnerships
• Local energy solutions
• Closeness to consumers in the participating countries
• Simplifies the possibilities and gives an overview
• Prioritizes the investment
• Provides a compelling offer
Tailormade solutions

Segments
- Dweller
- Dwelling

Drivers
- Dweller
- Dwelling
- Both

Solutions
- Technical solutions
- Process solutions
- Organization

Dwelling

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Best case examples from 6 EU countries will inspire home owners to take action
http://go-refurb.eu/
deep home energy renovation exceeding borders and regions