Calculation methods for single-sided natural ventilation - simplified or detailed?

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

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www.go-refurb.eu

This project has received funding from the European Union'sHorizon 2020 research and innovation programme under grant agreement **No 649865**

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

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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

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13 partners in 6 EU contries

- Local authorities
- Local companies
- Knowledge institutions

From Belgium, the Netherlands, Germany, Slovenia, Estonia, Denmark

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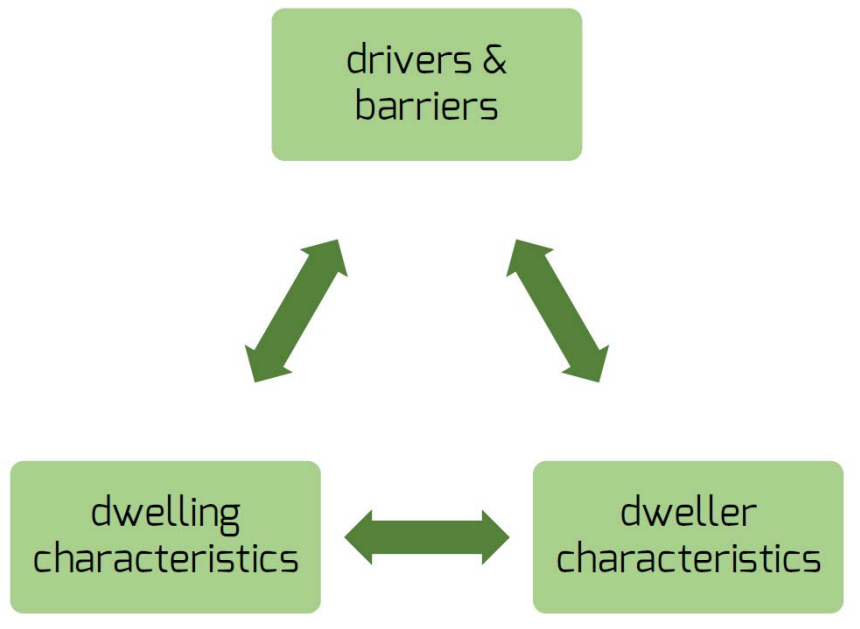
Drivers and barriers for deep renovation

Depend on

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

- The dwelling (type, condition, energy bill)



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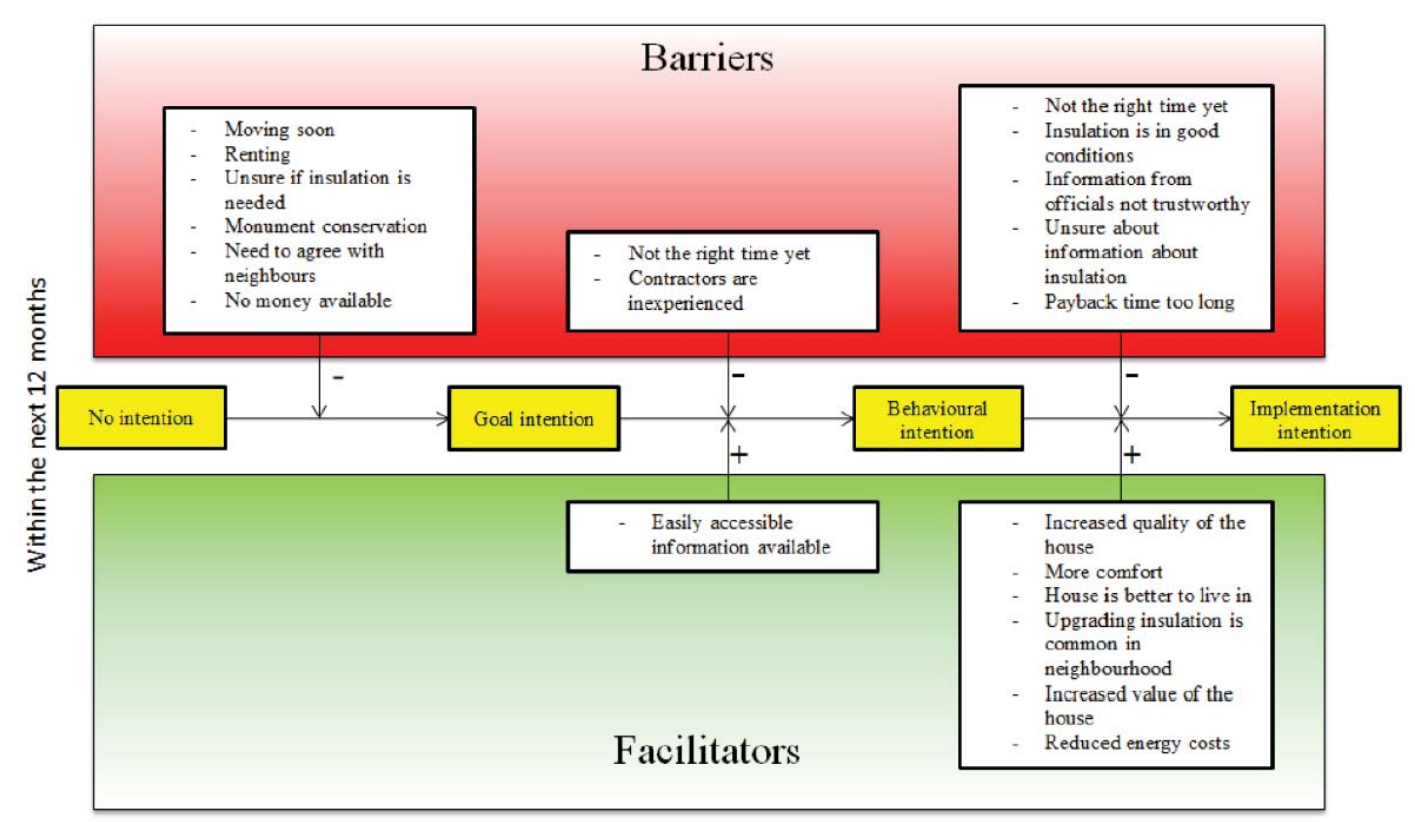
Drivers & barriers in different stages of the decision making process



Source: *Christian A. Klöckner, NTNU, Norway, 2013*

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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

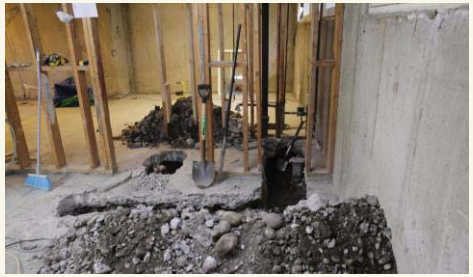
Availability of tailormade stepwise approach for NZEB-renovation

Inconveniences and defects in the house

BARRIERS:

Inconvenience linked to the renovation

Technical possibilities



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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

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Social and behavioural drivers and barriers

Social and behavioral 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

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DEMAND ⇔ SUPPLY

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

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One-stop-shop concept

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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

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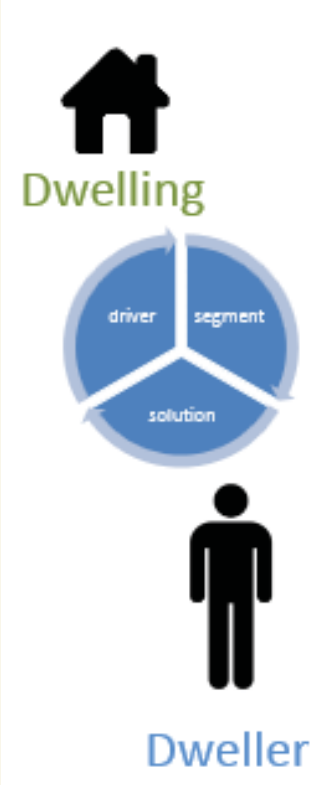
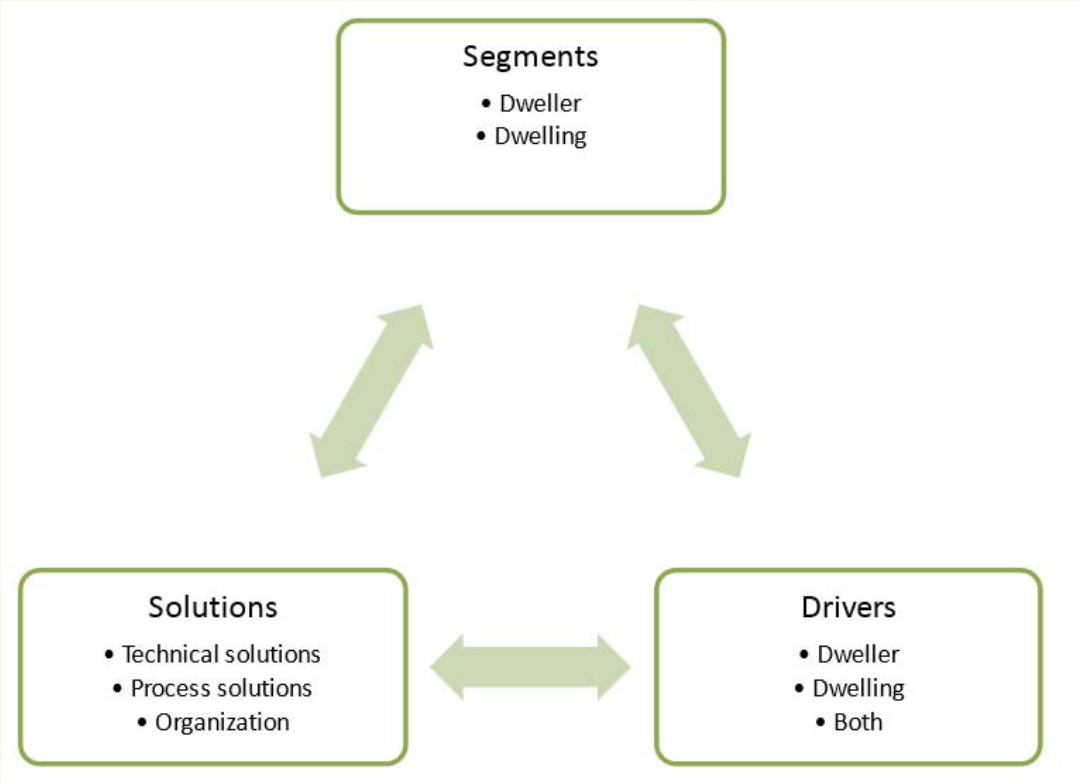
Tailormade solutions





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Best case examples from 6 EU countries will inspire home owners to take action

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deep home energy renovation exceeding borders and regions

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