

09/07/2018

Innovative business modelling combining energy refurbishment and DSM / DR

Place GoToMeeting
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Organisation TECHNOFI



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 768287.



Content

- **Express presentation of STUNNING**
- **Why we need innovative business models to support the energy efficient refurbishment of the EU building stock**
- **What we would like to explore in this workshop**



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Express presentation of **STUNNING**



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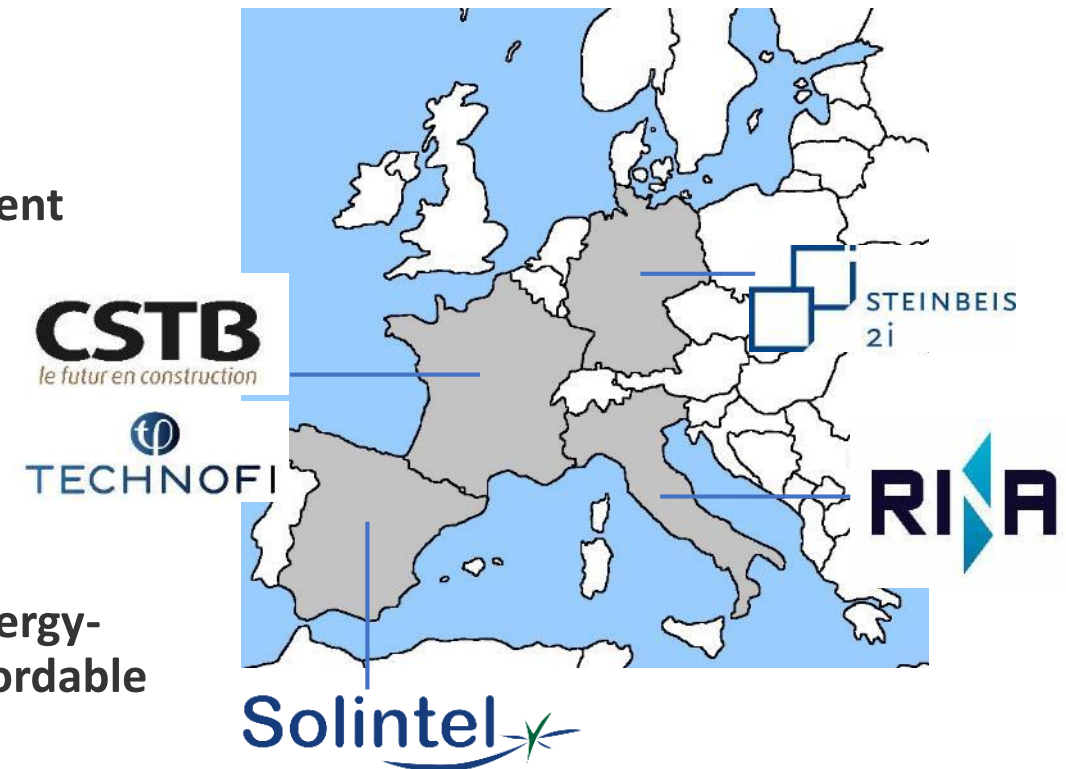
STUNNING at a glance

■ Coordination and Support Action:

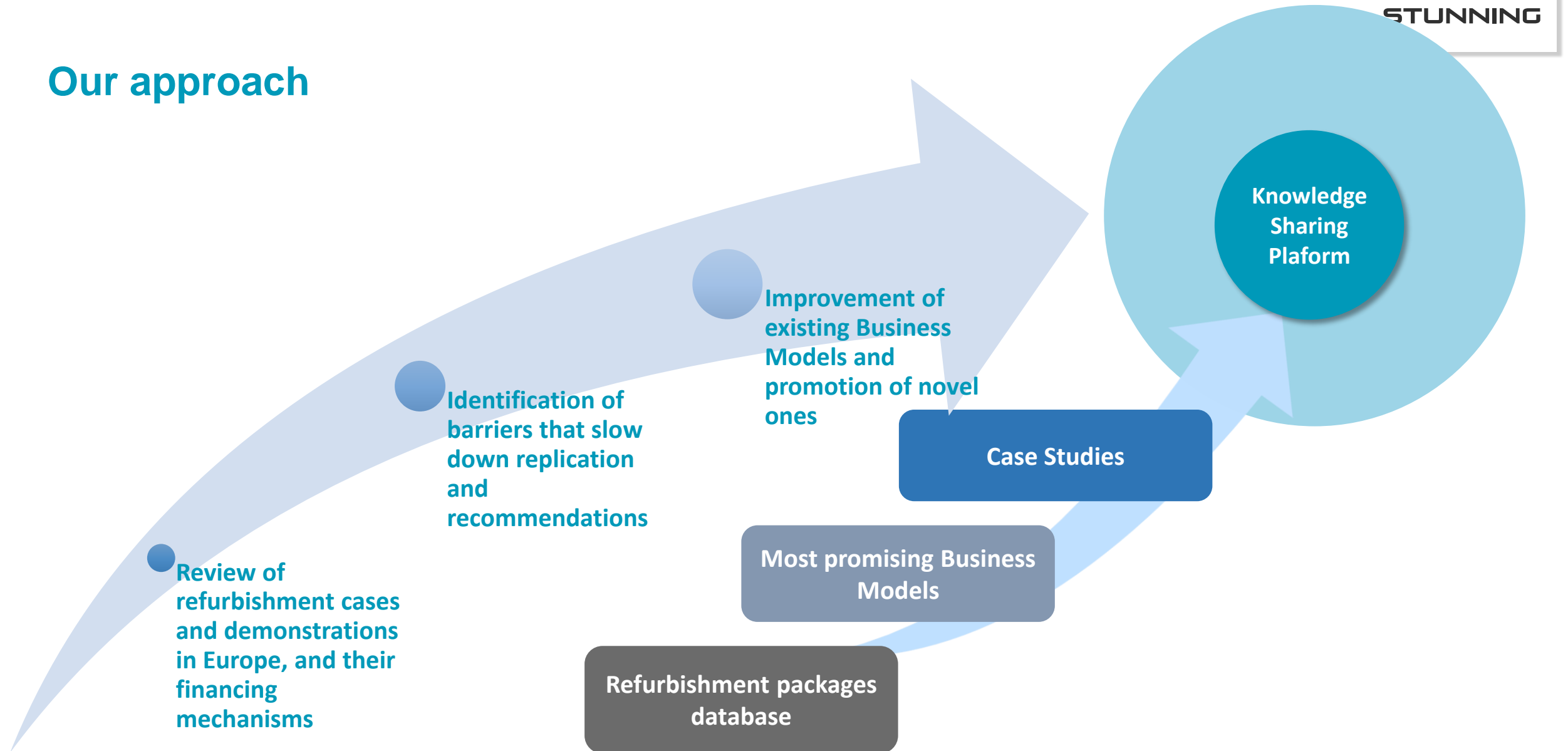
- “SusTainable bUsiNess models for the deep reNOvation of buildiNGs”
- Call: EEB-08-2017 “New business models for energy-efficient buildings through adaptable refurbishment solutions”
- Started on 02/10/17 - 2 years
- 5 partners

■ Objective:

- To accelerate the adoption of new business models for energy-efficient buildings based on integrated, adaptable and affordable refurbishment packages (including decentralised energy generation), and engage with the whole community of stakeholders

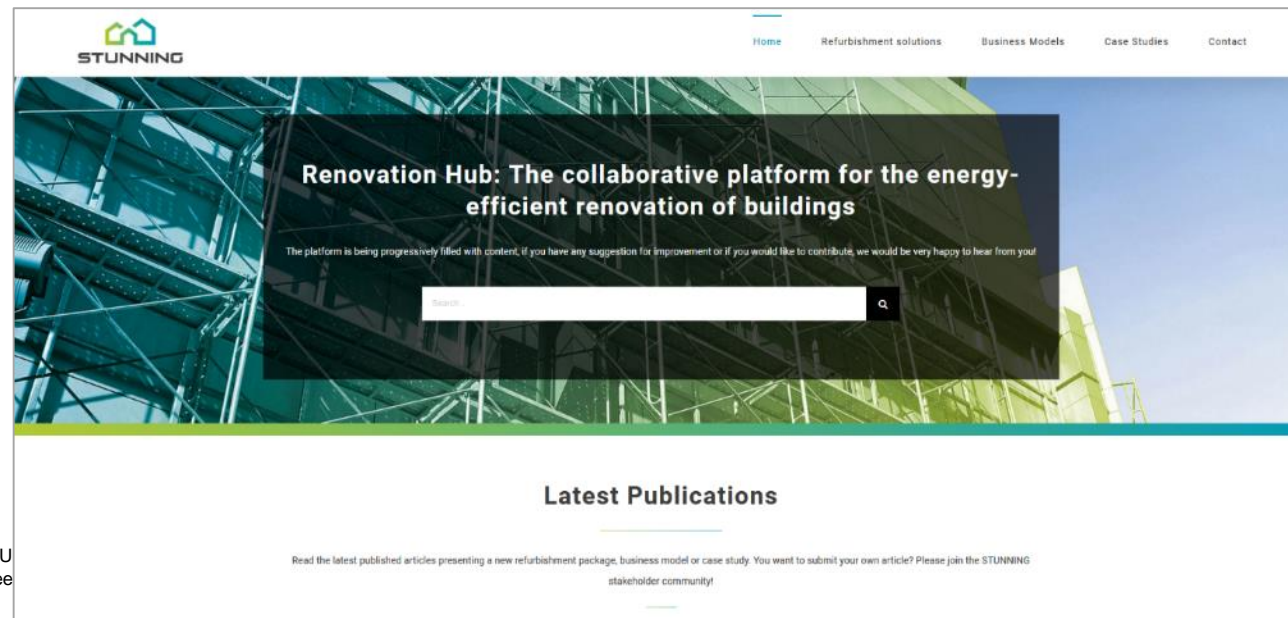


Our approach



Collaborative platform 'Renovation Hub'

- **Share knowledge on energy-efficient building refurbishment packages. Users will be able to:**
 - Compare available solutions for energy-efficient refurbishment
 - Find examples, information on costs (benchmark) for the renovation of public and private buildings
 - Identify successful business models that can be replicated to their local context
 - Share their own good practices and lessons learnt



www.renovation-hub.eu
(now being filled with
content 😊)



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Why we need innovative business models



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Challenges to be solved to accelerate the refurbishment rate

- **Today's rate of energy refurbishment (<1.5% on average) is much lower than what should be observed (3%) to meet EU objectives**
- **Renovation still faces various barriers:**
 - Barriers related to the structure of the construction and renovation sector
 - Fragmented sector
 - Pressure on profit margins
 - Lack of knowledge and skills
 - Normative barriers that can hinder the penetration of innovative technologies
 - Barriers that limit uptake of refurbishment solutions at the decision making level for homeowners, buyers or end-users
 - Can we tackle this with more user-centered business models?

Challenges for the customers, owners and end-users

▪ Behavioural barriers

- Low priority of energy issues
- Bounded rationality, high transaction costs (decision perceived as complex and irreversible, fear of disruption).

▪ Technical barriers

- Performance gap and uncertainty

▪ Market inefficiencies

- Split incentives (owners / tenants): the customers are not always the users
- Conflict of interest

▪ Informative barrier

- Lack of awareness and information on financing options;
- Lack of expert, commercially unbiased advice to help small owners to balance between financial and technical risks/benefits
- Uncertainties about contractor reliability

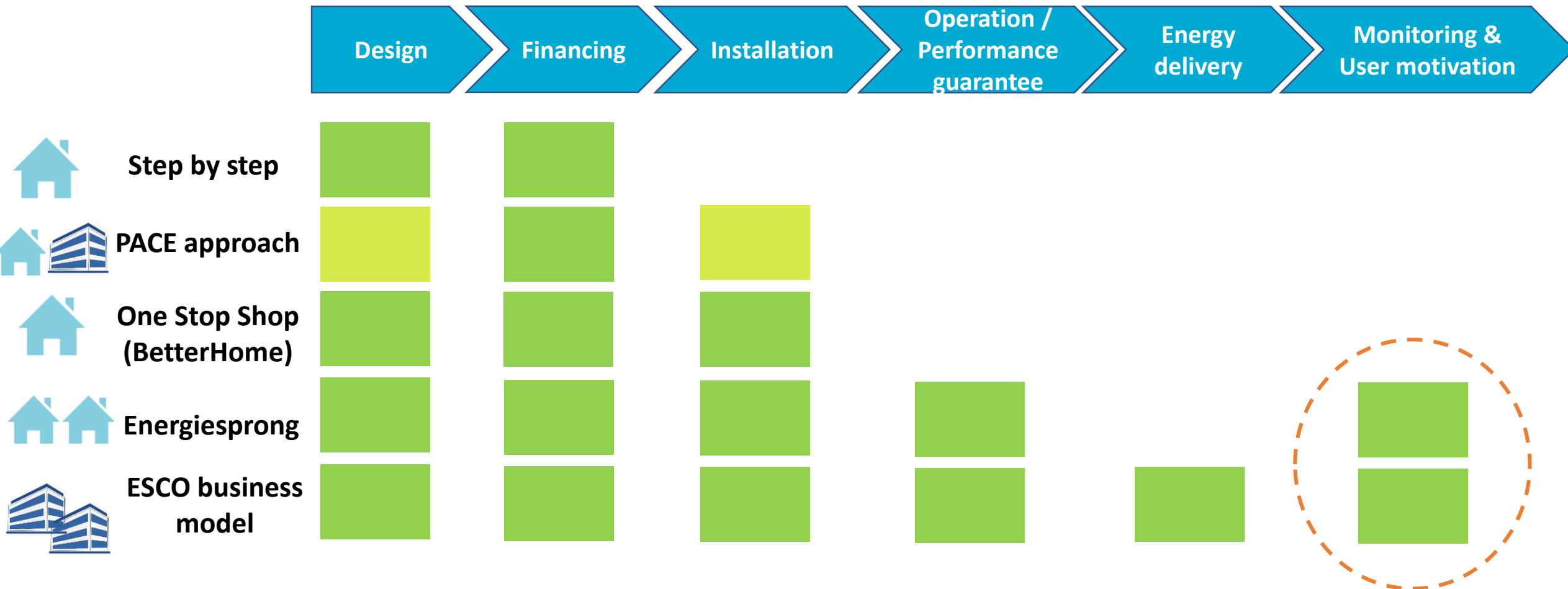
▪ Financial barrier

- High upfront cost, combined with difficult access to capital for some households
- Very delayed gain (investment approach focussing on payback)

How to address these challenges?

- **From pains to gains:**
 - Focus attention more broadly on the multiple benefits of energy renovation.
 - Disconnect from the “kWh” and “payback” rationale: co-benefits such as comfort and health.
- **Develop collaboration models at all levels**
 - Partnerships between manufacturers
 - Alliances at district scale
- **Raise awareness**
 - Pilot projects
 - Replication
- **Cover the whole value chain, from planning to operation, including energy performance guarantee : customised service package**

Example of innovative business models for building refurbishment



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Brainstorming idea



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Can we develop even more innovative business models to support the uptake of energy refurbishment solutions in the residential sector?

- **New smart energy services combining energy efficiency and flexibility?**
 - « ESCO ++ » for blocks of buildings and households
- **Bundling of different services:**
 - Energy refurbishment package covering the whole value chain, with long term performance guarantee,
 - Improvement of comfort
 - DSM or DR to improve user motivation and reduce the gap between designed and measured performance

