




10/03/2015

IWT Living Labs on dwelling renovations

www.kennisplatform-renovatie.be




IWT Living Labs on dwelling renovations

- » **Budget IWT:**
 - » 3M (projects)
 - » + 2M (Limburg projects)
 - » + 1M (coordination platform)
- » **Platform** (knowledge institutes: BBRI, Universities Ugent and **KU Leuven (Energyville)**, Passive House Platform and **VITO (Energy ville)**)
- » + **10 projects** (10 consortia of different constellations and number of partners) of which 2 with **VITO (Energy ville)** + **3 KU Leuven as Energyville**
 - » 6 social housing (5 social housing companies involved + 1 rent from social department of the city)
 - » 4 private housing (1 rental market aimed, 3 all private)
- » Energy (and monitoring) – Financials and financial solutions – Demand – Supply – Deburdening solutions

1. Phased affordable energy renovation of social apartment buildings - Drie Hofsteden Kortrijk focusses on low-energy and affordable renovations of socially rented flats.



- » Lead: Local social housing corporation
- » 2 apartment buildings (124 + 108 flats, 10 shops, 60 + 61 garages), built 1970-1973



- Phased, low discomfort renovation technique
- Prefab elements
- target 'almost' NZEB



- » Based on built-up experience in EU Concerto-demonstration project ECO-life "Sustainable zero-carbon ECO-town developments improving quality of life across EU"



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2. Energy renovations of Flemish representative single family houses and apartment buildings – ECOREN will focus on a market-oriented and socially acceptable renovation of outdated single family houses and apartment buildings to NZEB



- » Lead: Provincial social housing corporation
- » 2 clusters of 4 (semi)-terraced houses + small appt building (9 units), built in the 1970s



- All works in building envelope
- Fast renovation process
- Continuous living during process



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3. Renovation for NZEB in (terraced) houses in the private rent market – RenBen proposes an integrated approach for NZEB renovations for 3 clusters of single family houses in the private rental market

- » Lead: Local intermunicipal company
- » 3 x 10 houses in different communities



Split incentive!



- Phased approach
- Single point of contact – deburdening
- Task forces approach (3) for innovations



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4. Building together for a sustainable home wants to obtain a (self-created) sustainability certificate for 5 single family homes by working on innovative renovation techniques, alternative financing models and intensive guidance for owners and dwellers.

- » Lead: city of Roeselare
- » ≥ 5 dwellings



Label duurzame (thuis)

- Safety – Health
- Energy
- Water



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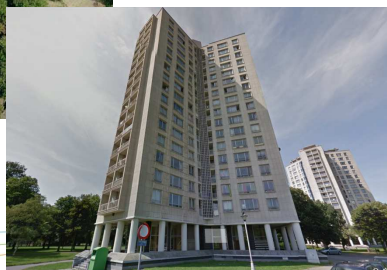
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5. Development of (cost-)optimal renovation strategies for architecturally historical buildings apartment buildings – Fierenscomplex will do as the title of the project says.

- » Lead: local consulting engineering firm **BB**
- » Again social housing – 3 x 96 flats – end 1950s beginning 1960s



Classified → Innovative envelope technologies



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6. In **Mutatie +** the consortium will experiment with modular techniques based on course of life, comfort and energy efficiency (NZEB). The project focusses on adaptations which make lifelong living of social housing possible. The applied method should result in a cost reduction of at least 30%.

- » Lead: local contractor **VD KREEKE**
- » Social housing - mutation dwellings built before 1995 – energy renovation alongside comfort renovation – 4 + 2 (1950s)



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7. With **ReMoFlex 'modular renovation of postwar houses'** the consortium wishes to develop a standardised, efficient and dweller-friendly renovation concept for houses from the 1960s and 1980s into NZEb houses.

- » Lead: building companies
- » Social housing – classified – 10 houses – fast (modular) - flexible



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8. **Werfgoed** wants to support home owners in Limburg to collectively renovate up to NZEB

- » Lead: provincial sustainable living expertise center
- » Development of 2 CR models
- » 4-5 clusters for a total of 25 renovations (Houthalen-Helchteren, Maasmechelen)




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9. **RENOSEEC**: renovations with social, ecological en economic surplus value through a collective approach in Gent; a development of a business model for collective, sustainable and feasible renovations of single family dwellings through the development of a catalogue of standardised solutions and financing models

- » Lead: KU Leuven (KAHO Sint-Lieven Ghent) 
- » 10 dwellings (19-20th century belt) through a CRM funnel



- » Big consortium with contractors and insulation material producers: Cantillana, Derbigum, FTB Remmers, ISOVER, Sto, SVK, Recticel Insulation, Alpas, Beneens, Durabrik



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10. In **'De Schipjes'** a hand-in-hand approach to building conservation and energy optimization in historical residential areas is tested

- » Lead: social welfare organisation of the city
- » 11 classified dwellings for accompanied living



- VIPs
- Micro district heating?



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» **Uniek aanspreekpunt**

» **Kennisopbouw en kennisondersteuning** aan de proeftuinprojecten

- » methodologie, technologie en proces

» **Kwaliteitsborging**

- » richtlijnen voor energetische meetcampagnes e, kostenefficiëntie-analyse,
- » zodat de output kwaliteitsvol, vergelijkbaar en exploiteerbaar is.

» **Kennisverspreiding** op maat van de bedrijven-doelgroepen

» Focusthema's: Business modellen, klant, financieringsmodellen, energiepreformantie, technologie energie, kostenefficiëntie-kostenoptimaal, technologie en renovatieprocessen, dubo en levenslang wonen

Posters met info over de verschillende projecten: <http://www.kennisplatform-renovatie.be/proeftuinprojecten-2/>



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» **Businessmodellen:**

- » ontzorgen van opdrachtgevers, succesfactoren voor samenwerkingsmodellen voor renovatie, kwaliteitsborging tussen partijen, innovatieve aannemingsvormen

» **Klant:**

- » praktisch ontzorgen van bouwheren, bewoners-benadering en enquêtering, marketing en waarde-beoordeling voor de klant, participatieve processen voor klanten
- » Vanuit VITO wordt een input vanuit sociologisch onderzoek aangeboden

» **Financieringsmodellen:**

- » organisatie-opzet van ESCO of kwaliteitsborging, minimale schaalgrootte of rond het thema van lange-duurtijd-contracten



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