



Zero Energy / Zero Energy-Ready Retrofitting

Jasper Sluimer | Brussels | 20th March 2019

Introduction 2ndSKIN Consortium



The Skin



The Installation



15 Solarpanels per home
7 panels installation/ 8
panels for household use

Installation shaft
integrated in design

Installation to maintain
from the outside

New detached balconies

Heat source, heat pump,
heat recovery ventilation
unit and hot water boiler.
drilling source

Before and after

Demonstrator project 12 apartments Vlaardingen, the Netherlands



Before and after

Upscaler project 183 apartments Vlaardingen, the Netherlands



Value proposition & added value



CO2 reduction



Circularity
of materials



Happy residents



Value property



Integration
supply chain

Upscaling

What are the barriers for large scale deployment?

- The lack of projects keeps the prices still high
- The business case for homeowners isn't profitable yet
(Doing nothing or standard renovation is cheaper and provides almost as much rent)
- Current government tax-rules and laws

How could they be overcome from a policy-making point of view?

- Upscaling through collaboration with major suppliers and other consortiums
- Implementation of CO2 taxes or tax reduction for energy efficient homes
- Long term commitment to the Climate Goals on an European scale (or even worldwide)
- Create a European platform for knowledge sharing for large and small companies which contribute to the Climate Goals

Path to a zero-carbon society

How could our solution be part of a city/region/country transition to carbon neutrality?

- 2ndSKIN dramatically reduces the heat demand of the dwelling and contribute to lower CO₂ emissions
- 2ndSKIN makes retrofitting possible in inhabited state with minimum nuisance, a solution that makes residents and homeowners happy
- 2ndSKIN lowers maintenance costs en living costs through lower energy use or even no energy use by zero on the meter
- 2nd SKIN provides monitoring the use of the installation, data is collected and we can act on this data
- 2ndSKIN is suited for different kind of transition scenarios on neighbourhood & district level
- 2ndSKIN's business model is based on a product-/service solution easy to fine-tune and to upscale in Europe



Achieving the climate goals is only possible by solid cooperation in innovation and realization, from European politics to home owners and companies in the supply chain!

Will you join us?