The Flemish Renovation Pact
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BRUSSELS
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Flemish Energy Agency (Vlaams Energieagentschap VEA)

- Operates since 2006 as an internal agency within the Flemish Ministry of Environment, Nature and Energy (80 FTE)

- Mission: to implement a sustainable energy policy

- The main tasks of VEA include:
  - promoting rational use of energy and environmentally friendly energy production
  - implementing the regulations related to the management and development of distribution networks of electricity, gas and heat
  - contributing to the implementation of the Flemish climate policy plan
Towards a Renovation Pact: why?

- European directive on Energy-Efficiency
  - Long term strategy for renovation of residential buildings
  - 3th Flemish Action Plan April 2014
    - Based on Energie Renovation Programma 2020 + strategy for forerunners NZEB
    - Update April 2017

- Link with European goals for Climate and Energy

- Translated in the Flemish Government Programm 2014-2019
Towards a Renovation Pact: why?

- Purpose: co-creation of a coherent action plan
  - Strong growth of renovation rate: 0.7 towards > 2.5%/year
  - Ambitious improvement of energy performance:
    - 75% reduction of energy performance indicator
  - Fight against energy poverty

How?
Government facilitates and supports this transformation, BUT all the stakeholders need to be engaged
- Partnership with shared means, information, activities and competences
- Shared ultimate goal, win-win
Towards a Renovation Pact: why?

The improvement of the energy performance has positive impact:

- Environment
- Quality of living
- Protection of the buying power of households
- Security of supply of energy
- Fight against (energy) poverty

A substantial increase of the renovation rate is a strong stimulus for the economic activity in a.o. the building sector
Towards a Renovation Pact: why?

Building sector (blue line) used to stimulate economic growth

Last years: lower activity leads to lower growth

Study KPMG: almost 34% of total cost of deep renovation (60.000 euro) flows back to the government.

On top:
- More employment
- Less unemployment benefits
Barriers for deep renovations

- Lack of knowledge on energy efficiency measures → Know-how on deep renovation
- Financial means
- Split incentive landlord / tenant
- Co-ownership
- Low transparancy/continuity of policy measures
- Low interest in energy savings, climate change, sustainability
- Impact on daily life: worries, dust,...
Overview of the Flemish building stock

In Flanders (13.522 km², population 6,25 million) we have over 2,6 million buildings.

Residential sector (3,1 million dwellings in 2,3 million buildings) = 13,7% of total energy use
Overview of the Flemish building stock

Almost 56% was built < 1971 and is over 45 years old

<table>
<thead>
<tr>
<th>Year of construction</th>
<th>%</th>
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<tbody>
<tr>
<td>&lt; 1900</td>
<td>8,01</td>
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<tr>
<td>1900 to 1918</td>
<td>5,43</td>
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<td>1919 to 1945</td>
<td>15,25</td>
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<td>1946 to 1961</td>
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<td>1962 to 1970</td>
<td>11,59</td>
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<tr>
<td>1971 to 1981</td>
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<tr>
<td>&gt; 1981</td>
<td>29,02</td>
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<tr>
<td>Totaal</td>
<td>100,00</td>
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</tbody>
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- ✓ 2,1 million single family houses
- ✓ 115,000 appartment blocks (average of 6,5 units)
- ✓ Ownership > 70% !!
- ✓ 13% or 350,000 not meeting standards for residential buildings
- ✓ 160,000 very poor quality
Overview of the Flemish building stock

Energetic performance based on 932,238 Energy Performance Certificates

- ✓ 1% < score 100
- ✓ 20.4% < 200
- ✓ 30% > 500
Proces of Renovation Pact

- December 16 2014
  - 34 partners sign engagement declaration Renovation Pact

- Conceptnote Flemish Government  July 17 2015
  - Minsters of Energy, Environment and Housing are commissioned to work out the crucial components of the long term renovation strategy

  • “Renovation Pact: we’re involved”

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wij doen mee
Results phase 1 - first part of 2015

- 6 working groups + steering committee
  - Selection of lever actions with impact

Conceptnote July 17 2015 - 10 Prioritised actions

1. Long term goal for existing houses
2. Good examples
3. Integrated policies
4. Financing
5. Obligations
6. Communication

- Long term goal/follow-up indicator
- Building passport
- Renovation advice
- Knowledge platform good examples
- Business cases renovation planning Demonstration projects
- Financial support
- Obligations
- Program fighting energy poverty
- Integrated policies
- Communication / marketing

Energy + Housing + Environment
Results phase 2 – fall 2015 - June 2016

- Smaller working groups and steering committee
  - Lever actions

- Note to the Flemish Government concerning next steps and links with other recently started ambitious transition projects
  - Vision 2050
  - Climate vision 2050
  - Energy vision / Energy pact

Renovation pact: where we stand

Long term goal is set

Currently under development:

Building passport
Renovation advice
Communication
Energy poverty program
Reformation of EE grants
Long term goal

Option 1: package of measures

Option 2: Energy performance indicator
Long term goal

Option 1: package of measures

Maximal U-values components building envelope
- roofs, walls, floors: 0.24
- windows 1.5 W/m² glass= 1.1
- Doors: 2

Minimal standards heating installation
- Highly efficient heating, cogeneration, heat pump

In communication: air tightness, ventilation en solar protection
Long term goal

Option 2: energyscore

E60 of 100 kWh/m²

Building envelope: informative S-level
Follow-up indicator:
Long term: integration in building passport
Tot dan: dashboard of several sub-indicators

Academic study ongoing
Building passport

- Unique digital file for each dwelling
  - Relevante building aspects
    - Modular:
      - Energy use (actual and desirable)
      - Other building aspects
    - Public information
  - Accessible for owner authorized third parties
- Digitale safe for building information and works carried out
  - Self-service – owner or third parties
  - One-pager of attests and certificates
The building passport

- Service design based on inquiry > 1400

- Prototypes presented in February Batibouw building fair

- Light version available mid 2018
  → Integration of certificates (EPC, electricity, soil,...)

- Medium version 2019
  → Integration of information on building quality
  → Possible to upload evidence of renovation, building plans

- Full version 2020
  → Integration of renovation advice
  → Automatic request grants and loans

- Smart metering,.....
Renovation advice

- 2 types under development
  - Update of EPC: EPC +
    - General advice on renovation and costs
  - Full advice: adapted to concrete renovation plans of the owner
    - More details

- Testing of prototypes in 2017
- EPC+ full advice available January 2019
Energy poverty program

- Structural solution
- 680,000 inhabitants (11%, ca. 280,000 families) are living under the poverty threshold (60% median income)

→ 350,000 woningen (13%) need structural renovations
Energy poverty program

- Examples of social protection:
  - Installment plans for energy debts
  - Prepayment meters
  - Poverty check on policy under development
Energy poverty program

Examples of energy savings actions

- 0% renovation loans
- Free energy scans (20,000 per year)
- Social programs private rental market
  - roof insulation, cavity wall insulation, windows
  - High grant + practical support
Grants for the realisation of the long term goal

- Total renovation
- Collective renovation projects

= Public service obligations for the grid operators
Total renovation bonus

Bonus starting from third measure

5 years

Max. Bonus of 4750 € houses, 2375 € appartements)

Starting Januari 1 2017.
Combineer en... vanaf 3 krijg je een bonus!

1. Nog 30 m² dak ongeïsoleerd?
   Gebruik isolatiemateriaal van minstens $R_3 = 4.5 \text{ m}^2\text{K}/\text{W}$!

2. Nog 30 m² gevels te isoleren?
   Isoleer langs buiten ($R_2 > 3$), via de spouw van 5 cm ($\lambda < 0.065$) of via binnen ($R_2 > 2$)!

3. Nog 5 m² raam te vervangen?
   Plaats hoogrendementsglas van hoogstens $U = 1.1 \text{ W/m}^2\text{K}$!

4. Nog 30 m² vloer ongeïsoleerd?
   Isoleer met isolatiemateriaal van minstens $R_5 = 2.0 \text{ m}^2\text{K}/\text{W}$!

5. Wil je zonnewarmte gebruiken om je te wassen?
   Plaats een zonneboiler!

6. Wil je huis milieuvriendelijk verwarmen?
   Plaats een warmtepomp!

7. Wil je een gezond huis en voldoende comfort?
   Plaats een ventilatiesysteem om verse buitenlucht aan en vuile binnenlucht af te voeren!

Investeringskosten:

- 3 investeringen: 1250 €
- 4 investeringen: 1750 €
- 5 investeringen: 2750 €
- 6 investeringen: 3750 €
- 7 investeringen: 4750 €
Collective renovation

Project leaders = coördination

> 10 dwellings

400 € per dwelling for the time investment of the project leaders, on top of the regular grants

Not for social housing

Not for social housing
More information

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