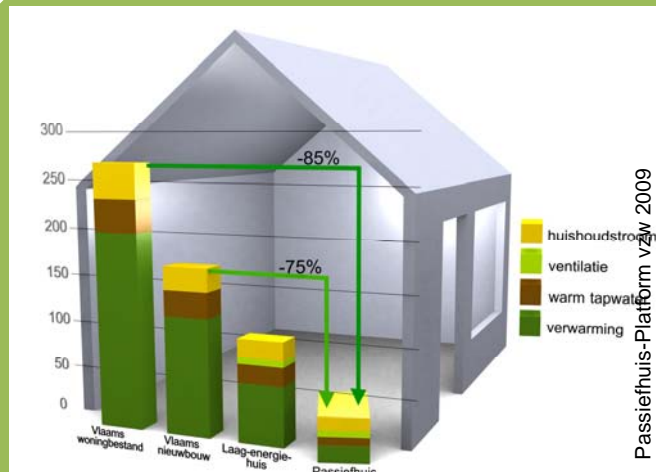


Low energy and passive houses

Status	Implemented from 2013 on
Location	Belgium, West Flanders, Ieper, De Vloei
Spatial info	Building; Urban quarter or street, Residential area
Measure type(s)	Increase energy efficiency; Urban setting
Contact	www.devloei.be , www.passiefhuisplatform.be



Description and Aim

At de Vloei every builder is obliged to the construction of a low energy home as a basic requirement, with the aim to have a number of passive houses in the quarter. Points of interest to achieve such buildings are insulation, ventilation, passive solar design, passive cooling, cold spots, air tight building envelope, etc.

During the planning process of the quarter, the project developers pay attention to the orientation of the plots and the zone of the plot on which can be built.

Adaptation to climate change

Problems addressed:

Heat / heat wave, other like mitigation

Higher temperatures during summer.

Mitigation: less exhaust of greenhouse gases (less heating, no cooling).

Receptor(s):

Population, built environment

Experiences

Functionality:

Adaptation to heat waves:

Creating good living conditions with lesser energy use for heating in winter and no energy use for cooling in summer, even when temperatures are rising in summer.

Further synergies/benefits:

Better living conditions in the houses (less overheating during summer, better air quality, better ventilation, less heating needed during winter).

Costs:

Cost for building a low energy or passive house are 10 to 15% higher than for a standard building.

Funding:

Federal government: funding and lower taxes.
Flemish level: funding (through electricity network manager). Local funding (Ieper): for sustainable building techniques (e.g. heat pump, solar collectors, insulation, ...)

Stakeholder involvement:

Municipality of Ieper (building permits), urban planners (design), architects (design), constructors (construction), residents (design and use of buildings), property development companies (design of buildings).

Acceptance:

Social acceptance is growing. Low energy standards are more accepted than passive house standards.

To raise acceptance:

For persons within the project: information sessions and study visits for growing support. For persons outside the project: presentations about De Vloei.

Obstacles/restrictions:

Higher price at the moment of building the house.
Lack of experience with architects, contractors.

A better energy performance of a building than what is obliged through Flemish regulation can only be obliged through the selling conditions set by the project developer. It might be possible that in the near future municipalities in Flanders will receive some legal authority on the matter.