IEWAN - DE VOSSENPLES - NIJMEGEN - NL







lewan, De Vossenpels, Nijmegen, Netherlands 2009 - 2015 https://www.iewan.nl

Image bottom right: www.iewan.nl



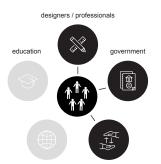


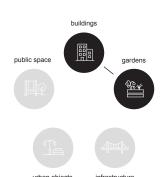
Many homes in the neighbourhood De Vossenpels have been built with organic or natural building materials, such as wood, loam and straw. What is interesting about the development is that the visual quality (architectural use of materials, quality of public space) was not imposed from above, but was achieved through joint consultation at neighbourhood level. In this case study, taking the example of Strowijk (IEWAN), a realized co-building project in De Vossenpels, we analyze the ambitions residents had regarding circular material use, how they went about it and what value was ultimately created for the neighbourhood.

Enablers

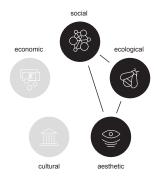
Initiatiefgroep Ecologisch Wonen Arnhem Nijmegen (IEWAN) was the first co-building group to plant their flag in the area. They wanted to develop self-managed social housing and had high ambitions for sustainability, specifically in terms of material use. The complex, consisting of 34 social housing units (21 for self-contained and 13 for non-self-contained occupancy), is built entirely of wood, straw and loam.







civil society



Resources

IEWAN residential community based the design of the housing complex entirely on ecological principles. It is the only residential complex in the Netherlands of this size that was realized using the straw-construction method: straw bales are installed in a timber frame and then finished with loam. Besides the focus on ecological building materials, circular principles have also been applied at other levels to close the various resource cycles. For example, waste water is purified through a reed filter, washing machines run on rainwater and solar panels generate energy for their own use.

Actors

IEWAN drew up a detailed programme of requirements and budget itself and ultimately developed a customized ecological living environment together with architectural firm Orio. Turnover requirements for the selection of the contractor were imposed by Talis housing association, the project's financier. Ultimately, contractor Vastbouw was chosen as the construction partner. They had no previous experience in straw construction, which at times created considerable challenges during construction.

Spatial elements

The residential building is designed around a collective courtyard. This garden includes a helophyte filter with reed plants to filter waste water. The green roof of the community building helps prevent surges on the sewer system, as the plants absorb the water, which then returns to the atmosphere through evaporation. A collective garden has been created around the building based on principles of permaculture, a sustainable agricultural method in which the land is cultivated following the example of natural ecosystems. This garden forms a stable ecosystem with a variety of plants that provide edible produce for residents.

Values

IEWAN's example makes it clear that building on ecological principles can also generate social, aesthetic and economic value. Building with straw made it possible for residents to help build themselves, which ensured a high level of involvement right from the start of the development. The wooden cladding gives the building a sustainable character. The ecological aesthetic is further enhanced by the coherence between the residential building and the surrounding green outdoor space.