

Green wall – Inner city

Status	Implemented in 2010
Location	The Netherlands, Gelderland, City of Nijmegen, Inner city (Arsenaalgas)
Spatial info	Building; City centre
Measure type(s)	Green walls; Water retention; Urban texture
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Description and Aim

The green wall system is attached to one side of a building the municipality rents in the city centre. The wall measures 190 m² and consists mainly of different types of ivy. The wall is combined with a drainage system so water is provided when necessary.

The wall is made of multiple boxes above each other in which the plants are placed. In each box the plants grow on a railing of about 2 meters high and thus cover the wall behind.

Adaptation to climate change

Impacts will be mainly on the direct surroundings

Problems addressed:

Heat wave

Receptor(s):

Built environment

Aim of the project is to provide more green in the city centre that will help cool the direct surroundings and the building, clean the air and make the city more attractive.

Experiences

Functionality:

There are different systems available for making a green wall. It is therefore necessary to make the right choice for the situation. This takes time and many calculations to define the strength of the building or wall you want to use. Also designing a good system for the watering of the plants is an important part of this stage of the planning. It is Important to choose the right plants, because after two years 50% of the used plants in Nijmegen died because of the severe winter temperature. But in the convention with the contractor, the municipality was insured against such a risk. Thus, the renewal of the plants had to be paid by the contractor.

Further synergies/benefits:

Further benefits are: saving energy by cooling a building, capturing fine dust and CO₂ from the air.

The green wall adds a green element to the inner city at a prominent location which makes public space more attractive and helps to communicate the municipality's strategy to become a sustainable city.

Costs:

About €140.000,- (190 m²) for the green wall including the watering system.

Funding:

International: Future Cities.

Municipal: Programme "Green Allure Innercity".

Stakeholder involvement:

Owner and tenants (business) of the building.

Acceptance:

In general there are acceptance issues when installing green in such an innovative way. People (both inhabitants and politicians) discuss about the costs and the necessity of this type of green.

Obstacles/restrictions:

It can be difficult to convince the committee on building quality. The owner of the building has to agree with the project. The building must be suitable to carry the weight of the construction.