

International Green Roof City Network

Case Study Rotterdam, Netherlands



1) City Data

Location

Rotterdam (Provincie Zuid Holland) is the second-largest city in the Netherlands and one of the largest ports in the world.

Area

325.79 km² (land 208.80 km², water 116.99 km²)

Population

620,000

Other Information

Rotterdam is located in the river delta where the river Maas flows into the North Sea. Antwerp is about 100 km south of Rotterdam. Amsterdam is about 50 km to the north.

2) Description of the local Green Roof Policy Initiative

2.1 Start

Year 2008 (financial incentive)

2.2 Expected environmental benefits

- Stormwater management (very important)
- Biodiversity
- Urban Heat Island Effect (very important)
- Air Quality
- Climate Change (very important)
- Energy Savings (very important)
- Beautification of the City

2.3 Environmental benefit that is the carrier of the green roof initiative

Rotterdam's problem is that, because of climate change in the region, rain is falling more often and in greater quantities. Surface water management and sewer systems were not designed for this. A counter measure is to keep as much water as possible on the roofs of the city and let it be released slowly. This should also help improve other aspects of the urban climate, like the urban heat island effect and particulate matter pollution in the summer. There are other valid arguments, but which are less tailored for Rotterdam.

2.4 Support instruments that are used by the municipality to promote green roofs

- Building, landscape, energy, or other code or policy (e.g. land-use plan, green roof bylaw, zoning code, green factor, design regulations, etc.)
- Reduced stormwater fee
- Financial Incentives
- Tax Credits
- Favourable Credit Terms
- Density Bonus
- Demonstration Projects
- Ecological Labels
- Press, Internet
- Education and Information (e.g. seminars, conferences, green roof tours, etc.)
- Research
- Local Green Roof Guidelines
- Consultancy offer for constructors, investors, building owner
- Other instruments

Description of support instruments

The green roof policy consists of the above mentioned elements. A key element is the 25 Euro / m² subvention. The other measures are designed as support and to speed things up. The programme is part of the city's larger water plan. The plan lists other measures to fight the effects of climate change.

3) Number and area of green roofs

Number of Green Roofs > 200 (2014)

Area of Green Roofs: > 200,000 m² (2014)

4) Challenges and future prospects

Enough money to maintain the financial incentive

Deepening the programme by setting higher demands for water retention on Green Roofs and by offering diversified information to specific target audiences.

Broadening the programme to a sustainable roofs programme, which focuses not only on Green Roofs, but also includes energy production or roofs (yellow roofs), water retention roofs (blue roofs) and social functions on roofs (red roofs).

5) Contact persons

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6) Internet resources

<http://www.rotterdam.nl/groenedaken> (Dutch language)

http://www.rotterdamclimateinitiative.nl/en/100procent-climate-proof/projecten/green-roofs-programme?portfolio_id=57 (English Language)