WATER DRAINAGE

OBJECTIVE

Drain rainwater.

DESCRIPTION

Construction of urban water system elements for draining rainwater (canal systems, infiltration wells) and improvement of infiltration capacity.

EXPECTED RESULTS

Implemented and optimized surface or underground canal system through: infiltration ditches, basins, wells, galleries, systems of ditches and ponds or similar; reduced sealing surface by building water-permeable pavement; reduced flooding during peak flows, increased life quality, and improved biodiversity.

RESULT INDICATORS

Area of water-permeable pavement [m^2]
Length of water system elements [m or km]

INVOLVED ACTORS

Municipalities and technicians.

EXPECTED TIMELINE FOR ACTION

- Short term (1-4 years)

BEST PRACTICES

- Rouen – France
- Ieper – Belgium
- Bottrop – Germany; Tiel – Netherland
- Kamen – Germany
- Nijmegen – Netherland
- Arnhem – Netherland
- Veneto Region – Italy
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CRITICALITIES

The effectiveness of the measure can be low; the structure requires maintenance and is more expensive than the underground system; conflicts with other urban uses may arise.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Grey
- Green

SECTOR OF ACTION

- Public health
- Urban settlement
- Water resource management
- Other

CLIMATE IMPACTS

- Drought
- Extreme precipitation
- Extreme temperatures
- Floods

IMPLEMENTATION SCALE

- Association of municipalities
- Municipality

SOURCE

http://www.future-cities.eu/fileadmin/user_upload/pdf/FC_AdaptationCompass_Supplement_web.pdf
https://www.venetoadapt.it/wp-content/uploads/2020/03/Del%20A2%20-%20VenetoADAPT%20Adaptation%20State%20of%20the%20art%20assessment.pdf