

## Use of rainwater

Status	Construction from 2013
Location	Belgium, West Flanders, Ieper, De Vloei
Spatial info	Building; Residential area
Measure type(s)	Water retention; water drainage
Contact	<a href="http://www.devloei.be">www.devloei.be</a>



### Description and Aim

A catchment for rainwater is obliged per house/block of apartments (individual rainwater tanks) which goes further than what is described in Flemish legislation. The use of rainwater is obliged for the toilet(s), washing machine, outside faucet, faucet in garage etc.. Also, in certain cases, the capacity of the rainwater tank has to be bigger than what is defined in the Flemish legislation.

Aims are buffering of rainwater on the level of individual plots to prevent flooding during more severe rainwater events (impact on city quarter level, city level and regional level), buffering of rainwater as reserve for periods of drought and sustainable water use.

### Adaptation to climate change

The measure addresses the following changes: Increased storm events during summer. Less total amount of rainwater in summer. Increased amount of rainwater during winter.

#### Problems addressed:

Heavy precipitation / flooding, drought

#### Receptor(s):

Population, natural resources (water)

### Experiences

#### Functionality:

Less risk of flooding: the rainwater is collected in individual tanks per building.

There is availability of rainwater during periods of drought.

Rainwater tanks are compulsory in Flanders, although to a lesser extent. Lessons learned in Flanders: Rainwater tanks are effective, but only when the rainwater is used. The compulsory use is already enough to make rainwater tanks effective, the more elaborated use of rainwater at de Vloei makes the tanks even more effective.

#### Further synergies/benefits:

Sustainable use of water.

More use of rainwater means less use of drinking water (economic benefit). Avoid costs due to flooding.

#### Costs:

The average cost for a rainwater tank, pumping system and filters included is 2 000 €.

#### Funding:

In Flanders, no funding for rainwater tanks in new buildings.

#### Stakeholder involvement:

Municipality of Ieper (building permits), architects (design), individual builders, property development companies, residents (use of rain water).

#### Acceptance:

Social acceptance is high. Rainwater tanks are common use in Flanders

Information session for extended compulsory use. Plan advice for the builders.

#### Obstacles/restrictions:

Heavy rainfall: Overflow is directed into the surface water system for infiltration and slowed run-off of rainwater.

Shortage in rainwater: automatic refill of a part of the tank with drinking water.

Contamination of rainwater (bird faeces, leaves, etc.). A system of filters removes leaves etc. No problem regarding microbiological contamination since the use of rainwater is not allowed for personal hygiene or in the kitchen.