



Region West-Flanders, Belgium

Welcome to West-Flanders!

West-Flanders covers Belgium's entire coastline and includes cities like Bruges, Ostend, and Kortrijk. Home to 1.2 million people, the region blends dense urban areas with extensively farmed rural zones, and several key Natura 2000 nature sites.

Climate hazards:

The region faces severe water-related climate risks, such as water scarcity, extreme rainfall, pluvial and fluvial flooding. The polder landscapes, reclaimed below sea level, are challenged by sea level rise. Water quality is threatened by intensive farming, industry, and urban areas that lack proper sewage connections.

Our goal:

- 🌍 Climate-resilient adaptive landscape
- 💧 + 🌱 Water and soil supporting a biodiverse environment with a distinct identity
- 🏠 Attractive region for living, working, producing and recreation
- 🤝 Balanced win-win for all stakeholders

Enablers:

- 🔍 Knowledge partners and tools offer essential insights
- ⚡ Government increasingly recognizes the need for action
- 🌱 Projects foster co-design and implement NbS regionally

Barriers:

- 📍 Different local, regional & national interests and goals
- ❓ Lack of knowledge and trust in NbS among farmers & citizens
- 👁️ Lack of a common vision on climate resilience and integration of NbS in long-term regional transformation & scaling strategies
- 📊 Lack of frameworks for monitoring & performance assessment
- 🗳️ Uncertainty and lack of ownership for NbS responsibility
- 🔧 Lack of long-term maintenance responsibility for NbS
- ⚖️ Lack of regulatory frameworks for supporting, enforcing & scaling solutions
- 💰 Unclear financial roles among partners in funding models
- 🔗 Disconnection of costs & benefits with few incentives to invest for citizens and municipalities
- 🕒 Lack of space (every m² counts), time and personnel

Demonstrators:



Water level rise in Oudlandpolder

Support a vision for transition at landscape scale towards the design in the context of water level rise agreements.



Constructed wetlands for households

For households not connected to the sewer, decentralized systems like constructed wetlands offer effective treatment of wastewater and improve local water quality.



Re-naturalization of streams

Reshaping the streams by actively changing its course to slow down water and reduce peak discharge downstream, increasing infiltration and recharge of the groundwater table.



Agro-ecological soil improvement in IJzer valley

Additional knowledge and examples are needed to understand its benefits and promote wider use. This demo assesses if and how governmental land can serve as a lever.



Constructed wetlands for industry

Use of a constructed wetland to treat brine from a drinking water installation. Additional knowledge is needed on technical performance.



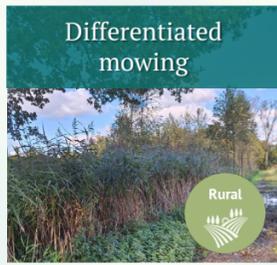
Sustainable farming

Non-tillage and carbon farming are practices aimed at better soil management resulting in a more climate robust agriculture.



Water level rise on cropland

Weirs can tackle agriculture drought by supporting natural ecosystems. However, skepticism remains due to poor placement and incorrect maintenance.



Differentiated mowing

Differentiated mowing applies different practices along waterways (e.g., block or one side mowing). Maintaining vegetation can purify water and provide habitat.



Riparian zones in the valley of the Machuit

In the Machuit valley, bank restoration with riparian zones can contribute to the landscape restoration of the area and help build up climate resilience.

⏪ Past 2 years:

- Baseline of the region (incl. identification of climate risks)
- Kickoff demonstrators (incl. monitoring campaigns and interviews)
- Regional workshops on focus area Male-Lieve and definition of next steps & actions
- Provincial masterclasses towards a regional climate adaption plan
- Participation in several conferences and events

⏩ Future 2 years:

- Co-design and monitoring NbS demonstrators
- Strategies for one or more focus areas
- Portfolio development
- Stakeholder involvement (infomarkets and regional workshop)

Regional Partners

