

June 2024

# The Blue Deal: Tackling drought and water scarcity in Flanders, Belgium

# A forward-looking approach to systemic change

In the summer of 2020, the Flemish Government (Belgium) launched the Blue Deal, a unique programme with more than 70 ambitious actions to structurally tackle drought and water scarcity.

# Key Learnings

- A holistic approach ensures systemic change: To better balance supply and demand, the Blue Deal simultaneously tackles water availability and more efficient water use.
- Engaging a broad set of actors to achieve high ambitions: The Blue Deal ensures commitment at different levels by investing, regulating, and stimulating innovation.
- A forward-looking approach speeds up investments: A wide range of programmes, projects, and measures provide multiple benefits, both in the short and long-term. The Blue Deal accelerates investment and provides coherent financial and regulatory support.
- Building with nature: By investing in the restoration of wetlands and in Nature-based Solutions, droughts and water scarcity are managed simultaneously while biodiversity is boosted.
- A long-term effort: The innovative policy is anchored by a Blue Deal decree to sustain
  efforts in the long term.

# About the region

Flanders is identified by the Organisation for Economic Co-operation and Development (OECD) as a water-scarce region due to its low water availability per capita. Intensive water use puts intense pressure on water supplies. Flanders is the Dutch-speaking northern part of Belgium. It is a low-lying region by the North Sea and is densely populated with 483 inhabitants per km². Flanders is an agriculturally fertile region with a highly developed industry. The percentage of paved surfaces makes up 16% of the total surface area, which is among the highest in Europe.

#### **Climate Hazards**

Droughts, water scarcity

#### Sector

Water management

# **Key system**

Ecosystems and Nature Based Solutions

Critical infrastructure

Water Management



#### **Climate Threats**

Flanders is particularly prone to extreme weather, aggravating the already high risks of water shortage and droughts. The impacts are already very tangible, with the region experiencing heavy rainfall in two of the last seven years. This threatens the safety and well-being of the Flemish population, endangers natural ecosystems, and puts vital economic sectors at risk.

Due to recent droughts, navigable waterways and agriculture suffered significant damage. However, since water is a strategically important economic resource in Flanders, more sectors are becoming aware of the increasing risks. Recent periods of extreme weather have further impacted the already highly stressed aquatic systems and water-dependent terrestrial nature, such as wetlands. Those ecosystems are also vital elements of effective climate change adaptation.

#### Working together to tackle the impact of climate change through the Blue Deal

To tackle water scarcity and high-level water consumption, Flanders launched the **Blue Deal**, a comprehensive plan that contains more than 70 ambitious actions. The plan uses financial incentives and various tools to encourage and support multiple actors to roll out innovative partnerships, test new technologies, and persuade more people and sectors to come on board. Regional and local governments, private companies, associations, farmers, knowledge institutions, and representatives from the industry sector work together to retain water, replenish resources, and use water more efficiently. The Blue Deal increasingly focuses on sectoral integration and improved governance to achieve a paradigm shift among decision-makers and the general public.

"Sharing responsibility to build resilience against the effects of climate change can open windows of opportunity towards water security. The Blue Deal provides evidence that implementing actions on the ground ensures a better understanding of how the systems work. Developing innovative pathways and deploying more sustainable practices are accelerators for systemic change."

Minister of Environment of the Flemish Region

#### Investments in the field

The Blue Deal focuses on implementing actions in the field through government and local actor investments. These actions include:

#### ✓ More space for water

Restoring wetlands and developing green-blue infrastructure in rural and urban areas to restore the sponge function of the subsoil and provide water with more space and time to infiltrate. This helps to protect Flanders against droughts.

#### ✓ More robust drinking water supply systems

To guarantee the supply of sufficient and high-quality drinking water, water companies are increasing their efforts to reduce leakage losses, strengthen network interconnectivity, and protect and diversify water sources.

#### ✓ More water efficiency

Water users focus on less consumption, smarter use, and more water reuse to improve efficiency. By committing to collaborations, such as exchanging surplus water, new opportunities arise to better balance supply and demand. Providing financial support for collaborations also gives local partnerships, companies, and organisations a sense of ownership, thus strengthening their commitments to creating water resilience against climate change.

The Blue Deal provides financial support for research projects promoting sustainable water use in agriculture and industry, offers free water efficiency audits for SMEs, and supports companies in accordance with state aid rules.

#### Regulations and implementation of measures

Regulations are adapted to remove obstacles or gaps, such as encouraging water reuse or better management of water levels in watercourses. Other measures include improving policy instruments, such as local rainwater and drought plans or water audits. Special attention is paid to the automation of groundwater and flow measurement systems, data availability and leakage reduction.

## Communication and awareness-raising

To inform, educate, and encourage actors in the field, the Blue Deal also focuses on communication and awareness-raising campaigns through accessible initiatives to engage the general public. One example is the first Flemish 'Tile De-Sealing Championship', in which cities and municipalities competed against each other to remove the most road tiles. This helps restore the water absorption capacity of the soil and increase its sponge function.

## **Tangible results**

More than 500 million euros have been mobilised during the current legislation period of the Government of Flanders. The Blue Deal ensures tangible results:



Figure 1: Multiple actions related to the Blue Deal. Image Credits: Flanders Environment Agency.

The Blue Deal is partially funded by the post-COVID Flemish Resilience Plan. For a large part, the investment resources stem from the European Resilience and Recovery Facility. In that way, the Blue Deal is part of the implementation of the European Green Deal.

The Blue Deal also contributes to other benefits, such as increasing biodiversity, encouraging sustainable agricultural practices, and creating a climate-proof living environment. It thereby contributes to the EU Mission "Restore our Ocean and Waters", which aims to protect and restore the health of our ocean and waters through research and innovation, citizen engagement and blue investments<sup>1</sup>.



Figure 2: The Blue Deal contributing to multiple benefits. Image Credits: Agency of Nature and Forests (first left), Environment and Health (first right), Flanders Environment Agency (second left), Flanders Land Agency (second right).

## Maintaining the Blue Deal over time

To sustain the efforts, the Government of Flanders adopted a Blue Deal decree to anchor the actions in the integrated water policy. The setup is an overarching systemic approach. Within one year of taking office, each newly elected Government of Flanders sets the desired objectives in a Blue Deal memorandum. It includes structural funding and concrete measures for improving water quality and reducing the risks of water scarcity due to drought.

<sup>&</sup>lt;sup>1</sup> https://missionoceanwaters.eu/#/

# **Summary**

In 2020, the Flemish Government launched the Blue Deal to improve the climate resilience of its water system and the balance between water supply and demand. The Deal focuses on water availability and more efficient water use. Broad support is necessary to achieve the action programme's high ambitions.

By investing in, regulating, and stimulating innovation, the Blue Deal ensures commitment to implementing the actions. Its approach speeds up investment through numerous programmes, projects, and measures benefitting nature, agriculture, and the environment. Actions such as wetland creation and the implementation of Nature-based Solutions to restore the sponge function of the subsoil enable water to infiltrate and replenish the supplies. Droughts and water scarcity are managed while biodiversity is boosted. Other measures involve less and smarter water use or other water sources, like rainwater or purified wastewater.

The Blue Deal uses financial incentives and various tools to encourage and support the involvement of multiple stakeholders. As a result, the initiative has led to the restoration of over 6,300 hectares of wetlands, the redesign of more than 88 kilometres of watercourses, the adaptation of 113 hectares of paved surfaces to enhance rainwater infiltration, and the reuse of 24 billion litres of purified wastewater for cooling or industrial processes.

#### **Further information**

This project has received funding from the NextGenerationEU funds.

https://bluedeal.integraalwaterbeleid.be/about-blue-deal









#### Contact

https://bluedeal.integraalwaterbeleid.be/contact-vragen



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