

Good practice in integrating nature-based solutions into policy in Europe: The Blue Deal in the Flemish Region

Short description

The Blue Deal is an ongoing Flemish government initiative that tackles water scarcity, drought, and flooding by prioritising nature-based solutions such as wetland restoration, green-blue infrastructure, and depaving for water infiltration. The Blue deal fosters collaboration between government, local coalitions, and stakeholders to build climate-resilient landscapes and communities.

Key Messages

1. The Blue Deal integrates the nature-based solutions (NbS) into regional planning and funding to reduce water scarcity and increase resilience to flooding at the regional scale, including regulatory changes and innovations in the water sector that enable NbS.
2. Collaborative and participatory governance is a central element / profoundly important – through the local coalition partnerships who co-design, implement, and co-fund actions at the local scale. This process will be strengthened formalised through agreements with the government in the next years.
3. The Blue Deal faces challenges around the co-creation of solutions, the engagement of different stakeholder groups, and the potential linking of different projects together. The experts address challenges through local scale climate advisory committees and dedicated stakeholder engagement with the agricultural sector.
4. The Blue Deal is a strong example of a well-funded and effective programme that is evolving with the wider policy needs and delivering solutions, which potentially sets the foundations for the implementation of NbS through green and blue now and in the future.

Description of Policy

WHAT

The Blue Deal is a **programme and funding initiative** launched by the Flemish government in the summer of 2020 to address drought and water scarcity [1]. Initially, It defines the regional government's overarching strategy to deal with the issues of water scarcity, drought [1] and was then adapted to include flooding. It was launched initially in 2020 with the aim to support and incorporate the river basin management plan from 2022 to 2027, accompanied by the Great Acceleration Programme ('De Grote Stroomversnelling') [2]. Since 2020, it has seen the launch and completion of hundreds of projects across the Flemish region. The Blue Deal was renewed in 2025 in response to the growing threat from climate change, taking a more structural, coherent approach with clear goals and targeted actions [3].

WHO

The Blue Deal programme sits under the broader Flemish institutional framework for water as defined in the integrated water policy decree, managed at the ministerial level with the assistance of the Coordination Committee on Integrated Water Policy (CIW). This commission is responsible for the coordination of integrated water policy in the Flemish Region including the implementation of the EU Water Framework Directive and the Floods Directive [3]. The governance structure links the Flemish government agencies with local administrations and other stakeholders in an area development (Gebiedswerking) approach [3]. This encompasses thematic basin management led by the government, strategic coordination areas with major investments, and approximately 29 local area coalitions. These coalitions are made up of a variety of stakeholder groups at the local level including farmers, local community groups and other key stakeholders relevant to each specific project. The establishment of these local coalitions is crucial to the success of the Flemish Blue Deal.

HOW

The conceptual framework of the local coalitions programme is built on three cornerstone themes: agriculture, landscape/biodiversity and society. The programme is further structured around six priorities:

1. Public authorities set a good example and ensure appropriate regulations
2. Circular water uses as a rule
3. Agriculture and nature as a part of the solution

4. Raise awareness and encourage individuals to de-harden surfaces
5. Increase security of supply
6. Investing together in innovation to make our water system smarter, more robust and more sustainable

The programme lists more than 70 actions and 323 interventions in four categories:

1. **Investments in the field** - creating and restoring wetlands, developing green and blue infrastructure and depaving (unsealing ground) for more water infiltration
2. **Regulation and implementation** – reuse all types of water, improving management of local rainwater retention and storage to counter droughts
3. **Innovation and renovation** – the automation of ground water measurement, reduce leakage loss and re-use of rain and wastewater
4. **Monitoring and awareness raising.**

The resources go to investments by the Flemish government and to support initiatives by companies, associations, farmers, knowledge institutions, local authorities and citizens.

Some key outcomes of the Blue Deal, as quantified in 2024 [4; 5], include:

- Restoration of over 6 300 hectares of wetlands across the entire region of Flanders.
- Redesigned more than 88 km of watercourse.
- Adaptation of 113 ha of paved surfaces to enhance rainwater infiltration.
- Reuse of 24 billion liters of purified wastewater for cooling or industrial processes.
- 30-billion-liter water savings.
- 48 small dams on agricultural land.

Images

Figure 1 - Reed bed restoration de Zegge.



Image of Reed bed restoration de Zegge provided by Vlaamse Milieumaatschappij (Flemish Environment Agency) November 2025

Figure 2 – Green and Blue Vein in the Zuunbeek valley



Image of Green and Blue Vein in the Zuunbeek valley provided by Vlaamse Milieumaatschappij (Flemish Environment Agency) November 2025.

Type of Policy Instrument	Scale and Location
<p>PLANNING INSTRUMENT: Regional Programme / Strategy</p> <p>ECONOMIC INSTRUMENTS: Public budget for government actions and funding for local scale projects, land bank for exchange of agricultural land or compensation for land.</p> <p>STRATEGIC INSTRUMENT: The programme is supported by the Recovery and Resilience Facility (RRF) a framework of European Union and national policy. Furthermore, it provides overarching strategic oversight for the implementation of solutions across the Flemish region.</p>	<p>The Blue Deal Plan covers the whole of the Flemish region of Belgium. This corresponds with the scope of the Scheldt-Meuse River Basin plan in Flanders.</p> <p>The programme includes ongoing cross-border collaborations with the Netherlands and France through the International Scheldt Commission and the International Meuse Commission. There are also cross-border collaborations between bordering local authorities.</p>
Network Nature Themes	Types of NbS
<ul style="list-style-type: none"> • Climate adaptation mitigation and resilience • Biodiversity enhancement and ecosystem restoration 	<p>Restore / create: Solutions that involve ecosystem restoration or creating new ecosystems, provided they preserve biodiversity and deliver various ecosystem services.</p> <p>Sustainably use and manage: Solutions based on developing sustainable management protocols and procedures for managed or restored ecosystem</p>

Policy Good Practice Criteria	
NbS are mainstreamed in policy text and/or NbS are a central component of policy response	<p>The Flemish Blue Deal explicitly integrates NbS. The Blue Deal 2.0 (2025) second strategic lever '<i>maximum nature restoration and nature-based solutions</i>' states that NbS and a systemic approach form a guiding principle for calls for projects, with a commitment that funded actions will opt for nature-based solutions as much as possible, such as creating green buffers and blue-green infrastructure in rural and urban areas [3]. Many of the interventions within the programme focus on infrastructure to help manage water, but the interventions also emphasise NbS.</p> <p>Promoted NbS include:</p> <ul style="list-style-type: none"> • Restoration of wetlands and flood plain water retention capacities. • Natural water retention measures on farmland. • Restoration of riverbanks and channels, recreation of river meanders, restoration of lakes and ponds. • Sustainable urban drainage, urban rainwater retention (raingardens, green roofs, water buffers, etc).
Societal challenge(s) are addressed, and human wellbeing outcomes are identified	<p>The policy addresses the challenges of flooding and water scarcity, protection of groundwater, threats to public water supply, restoring rivers and water quality, smart wastewater and rainwater management, and opportunities for water experiences and recreation. The policy is a response to recurring droughts due to increasingly warm summers and heavy rainfall events, emphasised by the damage from the severe flooding in Wallonia in the summer of 2021. Flanders has a high population density, very high share of soil sealed under paving or building, water pollution issues and a high-water consumption and 32.4% of the Flemish region is defined as settled area settlements [9].</p> <p>The improvements in human wellbeing from the NbS investments are expected through the improved water quality and reliable supply, reduced flood risk, drought risk and water pollution risks. There is also a goal to increase outdoor recreation and create attractive natural play and meeting places for children and young people.</p>
Dedicated budget or funding stream	<p>The Blue deal is a well-funded policy. In 2021-2022 budget of 257 million, of which 190 million was awarded via RRF. In 2020 the realized budget was 87 million euro The Blue Deal 2.0 is allocated an new revised budget from 2025-2029 [3] which at the time of this case study fiche was under adjustment. The annual budget will increase from €14 million in 2025 and 2026, to €54 million in 2027 and €64 million in 2028, reaching €114 million in 2029 [10]. Demonstrating a clearly increase investment in the Blue Deal in the short/medium term. From 2026 – 2029 a supplementary budget of 20 million euro per year has been decided.</p> <p>The government budget also has a commitment of €20 million per year for the implementation of the River Basin Management Plan 2022-2027, which is divided between additional water treatment expenditures at Aquafin based on the reduction targets and additional resources for other actions related to the River Basin Management Plan. (most recent budget information available at [11]). By way of example, an accompanying budget of €150 million is allocated for work on non-navigable waterways [11]. The Mobility and Public Works Department will invest €808 million in water safety and infrastructure for navigable rivers [11]. Aquafin will spend €1.2 billion on water</p>

	<p>purification. Local councils will receive 1.1 billion euros to upgrade sewer systems [11].</p> <p>Finally, as part of the NextGenerationEU recovery and resilience plan Flanders is entitled to 38.06% of the budget for Belgium, or €1.72 billion [12]. 190 million of it was dedicated to the Blue Deal and serves as a valuable source of funding for drought policy of which a substantial part for NbS.</p>
Indicators of impact and evaluation framework	<p>The Flemish blue deal has many metrics for success which have been highlighted across different sources. [4,5]. To support these successes there is a Blue Deal Practical Guide Monitoring Manual that was written in 2023 [13]</p>
Inclusivity and stakeholder engagement	<p>Many of the Blue Deal actions are planned and implemented in a bottom-up governance by local partnerships facilitated by an area coordinator. These groups bring together local authorities, water managers, farmers, associations, nature organizations, businesses, and citizens, who take an active co-design role in planning and implementing local actions. In the new Blue Deal, these local coalitions can enter a full partnership with the Flemish government through the Local Blue Deals instrument [3]. The local coalitions are expected to co-fund actions. The Blue Deal runs communication and awareness-raising campaigns through initiatives to engage the public. For example, in the 'Tile De-Sealing Championship', cities and municipalities competed against each other to remove the most road tiles and restore water penetration to the soil.</p>
Consistency within policy mix	<p>Changes in water policy facilitate use of NbS</p> <p>The Blue Deal and the RBMP have driven several changes in water policy in Flanders. Legislative changes that promote the use of NbS in urban settings:</p> <ul style="list-style-type: none"> • Flanders regional planning regulation on rainwater (October 2023) [14]: sets stricter rainwater rules for all construction and infrastructure projects (including renovations and refurbishments), increasing the required buffer volumes and surfaces for infiltration and making it obligatory to divert the runoff from green roofs into the soil or create a buffer. • Flanders municipal remediation obligation decree (2023) [9] includes stricter regulation of the remediation and liability for new soil contamination and sustainable management of soil materials. <p>Legislative changes that promote the use of NbS in rural areas:</p> <ul style="list-style-type: none"> • The tightened manure policy in MAP7 [15] compensates farmers for not fertilising in the Flemish ecological network. <p>Supporting policy tools that facilitate the use of NbS:</p> <ul style="list-style-type: none"> • There are new guidelines for drainage systems designed to prevent rainwater from entering the sewer system [16]. • Optimization of the water test as a supporting tool in permitting [17 and 22]. <p>Flemish regional spatial planning rules promote desealing and protect open land</p> <p>The Flemish government has set a no net land take target in its strategic spatial development plan 2018 (known as 'Bouwshift') [18]. A legal reform in 2023 [21] introduced public utility easements, land consolidation by law with a spatial implementation plan (RUP), charges, nature development instruments, the planning benefit levy, and the right of first refusal. A Blue Deal land bank is being used to</p>

	<p>facilitate the exchange of agricultural land parcels in restoration areas with other agricultural land.</p> <p>Climate adaptation strategy and plans emphasise NbS The Blue Deal forms the basis of a chapter of the Flemish Climate Adaptation Plan 2021-2030 [19]. More broadly, the adaptation plan advocates the use of 'green-blue infrastructures', for example for rainwater capture in paved areas [16;17]. Although it does not explicit mention NbS some of the potential measures can fall under the broader umbrella of nature-based solutions.</p>
Knowledge development and transmission	<p>The emphasis placed on collaboration across different stakeholders' groups is a key component in knowledge development and transmission. The local coalitions help to embed the projects within the local context.</p>
Success Factors/Uptake/Impact	
<ul style="list-style-type: none"> • The programme has access to clearly defined and adequate budgets. The budget includes funding for key government agencies such as the Mobility and Public Works Department and Aquafin. • Synergies between policy objectives: the programme delivers on EU legislation and objectives in policy domains including water management, climate adaptation, agriculture, health and biodiversity. • A central success factor is the participation and collaboration between different stakeholder groups during both development and implementation and development, primarily through the 27 local coalition groups. These groups play a fundamental part in the communication, implementation and co-creation processes. The documentation and communication around the Blue Deal is both comprehensive and clear. 	
Barriers and Challenges	
<p>Spatial planning challenges - land use conflicts and difficult access to land: Change in rules about rezoning and compensation for land use changes in 2023 (Instrumentendecreet) [21] increased financial compensation for aggrieved landowners. A research study concluded that 11,000 ha of undeveloped land in Flanders requires urgent protection due to climate and nature objectives [20]. The no net land take target is an attempt to combat the serious spatial conflicts that arise in Flanders [20], while providing space for NbS. However, there are still challenges in its implementation. The Flemish government only has the power to freeze construction, and regional municipalities create and manage their spatial policy plans autonomously [20]. This does not always create the space for NbS to be implemented.</p> <p>Difficult to link many projects: The many Blue Deal projects are controlled, delivered, managed and funded by different organisations depending on their objective. This is a challenge to trying to maximise the linkages between different elements.</p>	
Potential for Replication/ Upscaling	
<p>Long-term continuity The government has committed (as part of the Blue Deal) to developing an investment strategy that provides the framework to strengthen the opportunities for private financing and public-private partnerships for investments in water and climate adaptation [3]. The strategy will involve the banking and insurance sectors and other potential investors and explore investment concepts and revenue models such as green bonds, rewarding the delivery of ecosystem services in conjunction with carbon farming.</p> <p>Replication The Flemish Blue Deal has a great potential for replication in other regions who are seeking to develop a unifying strategy to help tackle issues related to flooding and water scarcity in their region.</p>	
More Information & Sources	
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