Environmental engagement

Today's environmental challenges require decisive action from the construction industry. BESIX Group takes concrete measures to carefully manage both the environmental impact and the use of natural resources across all its activities.

Duqm Jetty in Oman: aerial inspection of the site

In 2023, BESIX placed increased emphasis on evaluating the impact of its operations on the environment and understanding how environmental issues affect its business. This double materiality assessment identified climate change mitigation as one of the priorities.

BESIX focuses on two sustainable commitments with regards to its environmental engagement: reducing GHG emissions and encouraging circularity in construction while promoting low-impact and innovating building solutions. The Group plans to reach net-zero by 2050 for its direct and indirect GHG emissions, demonstrating its dedication to transforming the construction industry for a more sustainable future.

The Group prioritises environmental responsibility in its operations. It seeks to conserve biodiversity and cultural heritage and is committed to the responsible use of natural resources and the minimisation of waste. Recognising the importance of the communities living in the areas where it operates, the company maintains open and honest relationships with neighbours and stakeholders and provides them with regular information on environmental matters.

These efforts contribute to achieving the following five UN Sustainable Development Goals:

Greenhouse gas emission management

BESIX is taking clear action to reduce its impact on climate change by managing its greenhouse gas (GHG) emissions[1] across its operations and developing sustainable and innovative solutions. The Group plans to combine current practical improvements with future transition plans to significantly reduce emissions across its global construction activities.

AMBITION

Become net-zero for the Group's direct and indirect carbon emissions by no later than 2050.

TARGET FOR 2024

Retain the highest level possible on the CO_2 Performance Ladder (level 5) for the Group's activities in the Benelux and France.

APPROACH

Focus on three key areas: increasing energy efficiency, using renewable energy sources, and making its equipment and vehicles more sustainable through electrification and sustainable fuels.

Active participation in innovative construction projects that minimize GHG footprint, and advising clients on building low-impact and energy-efficient structures.

RESULTS IN 2024

11 BESIX Group entities successfully retained the highest level possible on the CO_2 Performance Ladder[2] (level 5).

To achieve their goals, BESIX's activities in the Benelux and France, as well as the specific entities belonging to the Organisational Boundary[3] have defined and implemented:

- an energy and GHG policy;
- an energy and GHG reduction programme;
- a sustainable business travel policy[4];
- a mobility policy[5].

To achieve this ambitious target, BESIX has implemented a comprehensive action plan based on three key areas:

1. increasing energy efficiency across operations;
2. expanding the use of renewable energy sources;
3. transitioning to sustainable equipment and vehicles through electrification and sustainable fuels.

Wind turbine installed on BESIX Infra's site in Bilzen, Belgium. It covers 80% of the company's electricity needs.

[1] Greenhouse gases constitute a group of gases contributing to global warming and climate change, such as carbon dioxide and methane (source: Eurostat).

[2] The CO_2 Performance Ladder serves as a procurement instrument and a CO_2 management system.

[3] BESIX in the Benelux and France, BESIX Nederland, BESIX Environment, BESIX Infra, BESIX Infra Support, BESIX Unitec (including its subsidiaries BESIX Unitec Nederland and BESIX Connect), and Franki Foundations (including its subsidiaries Franki Grondtechnieken and Atlas Fondations).

[4] At BESIX Group level.

[5] For BESIX's activities in the Benelux and France as well as the BESIX Affiliates.

After the implementation of GHG management at BESIX Nederland in 2011, the group extended the exercise to BESIX for its activities in Belux-France and 10 Group entities in 2022. These entities will play a crucial role for the other Group entities in establishing a Group-wide GHG baseline in 2026.

BESIX's commitment goes beyond its own operations. It actively participates in innovative construction projects that minimise carbon footprint and advises clients on low-impact buildings and energy-efficient structures.

Following the Double Materiality Assessment conducted in 2023, climate change continues to be a top priority for BESIX. In 2024, BESIX Group began preparing for the reporting requirements of CSRD ESRS-E1 (Climate Change), highlighting its proactive approach to regulatory compliance.

REGIONAL IMPLEMENTATION AND PROGRESS

Several Group entities, including BESIX RED, Socogetra, Wust, and Cobelba, started their decarbonisation journey in 2024 by establishing emission baselines and identifying key emission sources.

BESIX Watpac also conducted their carbon baseline assessment in 2024, followed by the development of a decarbonisation roadmap based on a detailed scenario analysis. This outlines a comprehensive strategy to achieve net zero carbon emissions in line with the Science-Based Targets initiative (SBTi).

FORWARD-LOOKING APPROACH

The Group's climate action strategy is based on the best practices in both Europe and Australia, and includes clear milestones:

- **2025:** Alignment of regional carbon assessments into a unified Group GHG reporting process, and establishment of a Group-level GHG baseline;
- **2026:** Development of Group-wide reduction targets aligned with the SBTi, and creation of a comprehensive decarbonization roadmap.

Circular solar panels on the site office, A27 highway project (the Netherlands)

Contributing to the low-carbon transition

In 2024, BESIX and 10 BESIX Group entities, that form the Organisational Boundary, successfully retained the highest possible level on the CO_2 Performance Ladder (level 5) for their activities in the Benelux-France region.

Three ambitions

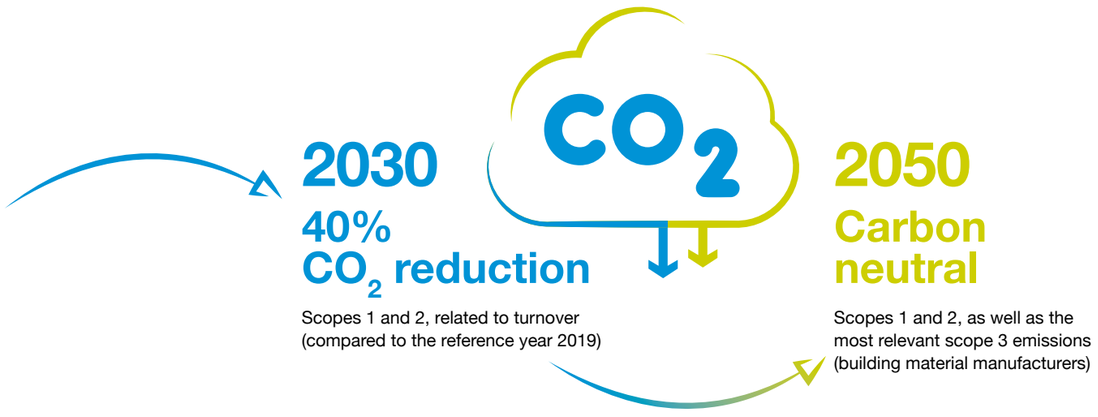
BESIX for its activities in the Benelux and France as well as the specific entities belonging to the CO_2 Performance Ladder Organisational Boundary, commit to the following ambitions:

1 **Achieve net-zero for their own direct (Scope 1) and indirect (Scope 2) carbon emissions by no later than 2050.** An intermediate reduction target of 40% has been defined for Scope 1 and 2 emissions (related to turnover) by 2030 for the Organisational Boundary using 2019 as the baseline year. This ambition has been cascaded to every entity of the Organisational Boundary by setting specific reduction targets per entity.

2 **Promote sustainable solutions to their partners and clients** and, in doing so, help them achieve their own climate goals and targets.

3 **Encourage and incentivise its supply chain participants, particularly the building material producers** with the greatest potential impact, to decarbonise their operations (BESIX's scope 3) as much as possible to contribute to global net-zero emissions by 2050 at the latest.

GREENHOUSE GAS EMISSIONS: BESIX GROUP'S AMBITIONS



Achieving net-zero Scope 1 and 2 emissions

For the Organisational Boundary, an overall Scope 1 and 2 intensity reduction target (per million euro turnover) of 40% has been set by the end of 2030, compared to the baseline year of 2019.

THE SCOPE 1 AND 2 REDUCTION PROGRAMME FOCUSES ON THREE AXES:

1 COMPANY CAR FLEET

Reduce the emissions of the Group's fleet (leased cars and utility vehicles) to zero by 2032 at the latest

In line with its company car policy, BESIX has been transitioning to fully electric vehicles since mid-2023, focusing on the Benelux-France region. The Group is ahead of schedule, expecting to have a fleet of 100% electric lease cars by mid-2029 – three years earlier than planned.

After testing utility vehicles in on-site conditions in 2023 and 2024, BESIX initiated mid-2024 the shift of its light-duty utility vehicles to fully electric utility vehicles. A similar shift of heavy-duty utility vehicles remains challenging due to range and weight limitations, but BESIX's Fleet department continuously monitors technological developments.

Headquarters of BESIX Infra and BESIX Unitec (Schelle, Belgium)

2 ELECTRICITY

Before the end of 2025, all electricity for the offices, fixed production facilities and projects under the operational control of BESIX shall originate from 100% renewable sources.

Regarding its own electricity consumption, BESIX has set an ambitious target: by the end of 2025, all electricity powering offices, production facilities, and project-related energy contracts, under its operational management, will originate from 100% renewable sources. In 2024, the Group proactively purchased green Guarantees of Origin for its electricity usage by its offices and fixed production facilities.

BESIX Infra and BESIX Unitec have made significant infrastructure improvements, including renovating the Schelle (Belgium) office into a low-energy building and converting the Bilzen office (Belgium) into a fossil-free heated building. Additionally, the planned renovation of Franki Foundations' headquarters in Saintes (Belgium) in 2026 further highlights the Group's commitment to reducing its environmental impact.

3 PLANTS AND EQUIPMENT

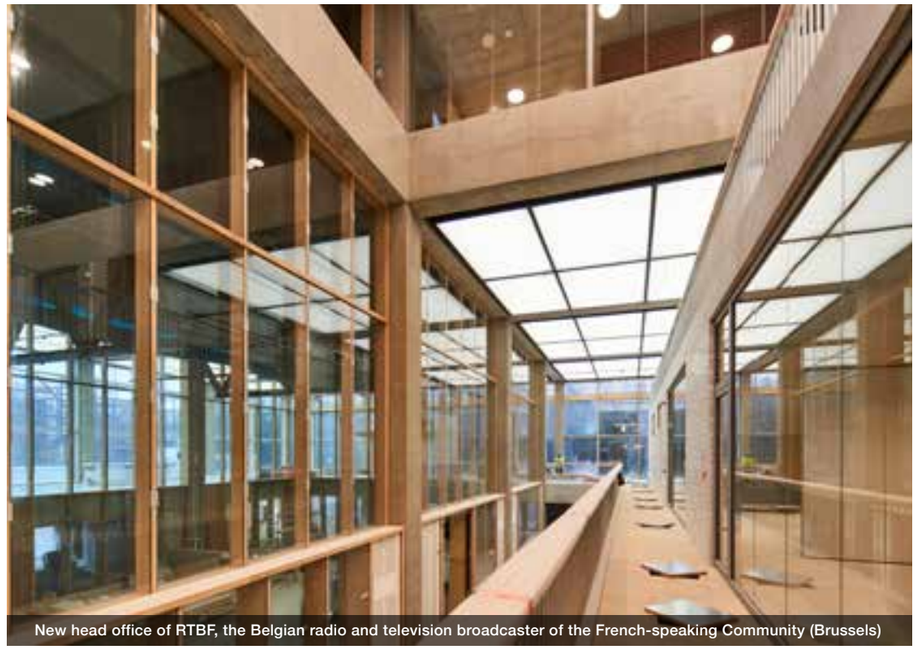
To reduce emissions from site installations and heavy equipment used on site, BESIX continues to invest in making its heavy site equipment fleet more sustainable.

The Group is making significant investments in sustainable construction technology as part of its equipment modernisation efforts. At the end of 2024, BESIX introduced a fully electric rotating telehandler following the deployment of its first fully electric 55 tonne crawler crane in 2022. BESIX Infra Nederland also expanded its low-impact equipment with a fully electric crane truck and an emission-free excavator. BESIX Infra, in partnership, completed a client's directional drilling task with a 2.5-meter diameter, fully electric drilling solution.

Both the European and Australian operations have started implementing Battery Energy Storage Systems (BESS) to help reduce costs and emissions. Additionally, the use of solar panels on BESIX premises for site installations and lighting continues to grow each year.

BESIX Watpac's decarbonisation journey

The company has laid a strong foundation for its decarbonisation efforts by completing a carbon baseline assessment and developing a detailed roadmap towards achieving net-zero goals. To support these objectives, BESIX Watpac has implemented several key initiatives that span various aspects of its business. These include integrating a reporting module system, improving supply chain management, and investing in sustainability education for its workforce. By developing practical tools like the Sustainable Site Set-Up Guide and regularly communicating ESG updates to employees, BESIX Watpac is fostering a culture of sustainability that extends from its leadership to project sites.



New head office of RTBF, the Belgian radio and television broadcaster of the French-speaking Community (Brussels)

Scope 3 emissions

BESIX has implemented strategic initiatives targeting Scope 3 emissions, which represent the majority of the company's carbon footprint. These emissions are indirect and occur within the company's value chain.

The Group actively encourages its key suppliers to decarbonise their operations as much as possible to contribute to global net-zero emissions by no later than 2050. BESIX is focused on minimising the environmental impact of materials it uses such as ready-mix concrete, rebar, (structural) steel, and steel (sheet) piles. Wherever possible, the Group uses design optimisation and the most sustainable ready-mix concrete formulations. This strategy allows the Group to address emissions throughout its value chain, concentrating on both upstream and downstream activities across the project lifecycle.

For the past three years, BESIX has conducted a qualitative Scope 3 analysis for its European activities, which is regularly updated. This analysis identified the most significant emission categories, including purchased goods and services (category 1), waste generated in operations (category 5), upstream transportation and distribution (category 4), business travel (category 6) and use of sold products (category 11).

Detailed progress reports, which include biannual updates for the organisational boundary, are available on the BESIX Group website.

UPSTREAM INITIATIVES

BESIX implemented several measures to reduce upstream emissions, with a particular focus on construction materials that have significant environmental impacts, such as steel and concrete. This initiative is in line with the Dutch Betonakkoord and the Circulair Betonakkoord Vlaanderen (Belgium).

BESIX plans to conduct a more detailed Scope 3 emission analysis at Group level starting in 2025 to comply with upcoming Corporate Sustainability Reporting Directive (CSRD) requirements. This analysis will form the basis for developing a robust and accurate Scope 3 GHG management system. The Group also aims to shift from spend-based to quantity-based calculations for a more accurate Scope 3 footprint and will develop a comprehensive reporting process to track progress on key performance indicators.

The Procurement department has developed a sustainable procurement roadmap, in collaboration with the Engineering department, while actively engaging key suppliers through forums and workshops. The Procurement department has also included within the 2024's objective of his team members to work with suppliers on 2 SDGs. The objective was to actively encourage key suppliers to collaborate and create initiatives regarding SDG 12 (Responsible consumption and production) and SDG 13 (Climate action).

In addition, the Group implemented a Sustainable Business Travel Policy in 2023 to address emissions from business travel. In a related initiative, the Group has taken a leading role in promoting Sustainable Aviation Fuel (SAF) through a consortium formed with Dubai Municipality, Emirates National Oil Company and Marubeni, supporting the UAE's Net Zero 2050 goals and ensuring compliance with new regulations on renewable fuels in aviation. The partnership, formalised in February 2024, aims to revolutionise the aviation industry by boosting the use of SAF. BESIX combines here its construction expertise with the integration of waste management technologies, facilitating the synthesis of diverse contributions towards SAF conversion.

DOWNSTREAM INTEGRATION

BESIX recognises the challenges of measuring downstream emissions due to the complexity and limited availability of data, particularly in categories such as "use of sold products" and "end-of-life treatment".

The Group's approach to downstream emissions includes:

1. Focus on design and build projects: BESIX prioritises efforts where it can maximise its impact on reducing emissions from the use and end-of-life treatment of sold products.
2. Partnerships: the Group is creating partnerships with both clients and supply chain to encourage sustainability choices.

BESIX has started to implement forward-thinking solutions. For instance, BESIX Nederland has developed a carbon/environmental cost indicator calculation process and prioritises sustainable solutions during project tendering to meet the expectations of the local market. BESIX developed a system of material passports, which became the standard in Belgium as well as an approach to use carbon as a design parameter.

Sustainable alternatives workshop

In May 2024, the Procurement teams organised a workshop bringing together internal departments, clients, and key suppliers to brainstorm on sustainable alternatives for cement and concrete.
The primary objectives of this workshop were to:

- brainstorm on sustainable alternatives for cement and concrete;
- envision BESIX's future in sustainable solutions;
- reinforce sustainable mindset in feasibility studies for future feasibility studies with clients and architects;
- develop management awareness of sustainability as a business opportunity.

Scope 3 initiatives

Several initiatives demonstrate BESIX's commitment to reducing Scope 3 emissions:

- **Steel:** on the Port of NEOM project (Saudi Arabia), BESIX selected a steel supplier able to provide low-carbon steel with an approved Environmental Product Declaration (EPD) for the sheet piles and king piles. The supplier's steel, produced using electric arc furnace technology, has a CO_2 emission factor below 0.4 tonnes per tonne of steel, compared with 0.7 tonnes per tonne of steel from other suppliers. BESIX installed over 48,000 tonnes of this material, reducing CO_2 emissions by 14,400 tonnes.
- **Foundations:** Franki Foundations is exploring alternative foundation solutions with low-impact concrete and steel to minimise carbon impact for clients.
- **Concrete:** BESIX Infra is studying the use of sulphur concrete sewer pipes as low-carbon materials.

Transformation of the Port of NEOM (Oxagon City, Saudi Arabia)

Collaborative approach

BESIX recognises that effectively reducing scope 3 emissions requires collaboration across the industry. To this end, the Group has initiated and participated in several joint efforts aimed at promoting sustainability throughout the construction sector. Examples include:

- Organising a second Supplier Forum on Sustainability focusing on the voice of BESIX's Clients and Architects to drive meaningful change in sustainability practices;
- Actively participating in Scope 3 workgroups organised by ADEB-VBA (the association of largest Belgian contractors) to address emissions from ready-mix concrete and steel;
- Partnering with clients and knowledge institutions on innovation projects to reduce energy consumption and CO_2 emissions, as well as to promote circular practices on the company's own construction sites and within the broader construction sector;
- Participating to the Technical Advisory Committee for the Belgian CO_2 Performance Ladder as a representative of the Belgian construction sector in the Central College of Experts of SKAO (Stichting Klimaatvriendelijk Aanbesteden and Ondernemen).

Moving up the CO_2 Performance Ladder in Belgium and France

After a successful pilot phase in Belgium from 2019 to 2023, the CO_2 Performance Ladder is now being structurally implemented in the country, with BESIX actively supporting its rollout as a member of the Belgian steering group. BESIX's commitment to this standard is evidenced by its Level 5 certification, the highest level achievable, for its activities in the Netherlands since 2011, which has now been extended to the Benelux and France.

Environmental management

BESIX believes that responsible environmental management is essential for its long-term success. The Group recognises the vital importance of understanding and actively reducing its impact on the surrounding environment.

The Environmental Management System of BESIX SA and several Group entities is certified ISO 14001.

AMBITION

Prioritisation of environmental responsibility in all of the Group's operations, and reduction of its environmental footprint.

TARGET FOR 2024

Zero major environmental incidents during the execution phase of construction.

APPROACH

BESIX prioritises environmental responsibility in all aspects of its business, minimising the inherent impact of its operations.

RESULTS IN 2024

No major incidents reported.

The 3,000,000 litres of collected rainwater on the Portonave site (Brazil) allows BESIX to produce 50,000 m³ of concrete

BESIX is dedicated to its environmental goals, starting with comprehensive assessments to evaluate the impacts of its activities. The Group trains its teams in sustainable practices, focusing on energy savings, renewable resources, and pollution prevention while protecting local ecosystems and cultural heritage sites. Community engagement is also a priority, as it shares updates on environmental efforts and requests feedback.

In 2024, BESIX implemented robust environmental protection measures and initiatives across all its construction activities.

BESIX Group's commitment is supported by:

- a QHSE policy, encompassing environmental protection, which guides the Group's environmental practices;
- an Environmental management programme, which translates the QHSE policy into operational actions.

The company's approach encompasses three main strategies:

- **Environment management plan:** before starting any project, BESIX conducts thorough environmental assessments to evaluate its impact on the environment. Measures in line with the "As low as reasonably practicable" (ALARP) principle are implemented to minimize the environmental impact.
- **Awareness and training:** fostering a proactive culture of environmental responsibility for employees and subcontractors, the Group provides specialised environmental training programmes focusing among others on air pollution control, biodiversity protection, hazardous materials handling, and waste management.
- **Expert partnerships and systems:** providing continuous support to operations for environmental excellence, notably with the support of environmental experts to develop and implement specific Environmental Management Systems (EMS) for each project.

Protecting the biodiversity

BESIX carefully plans each construction phase to safeguard natural habitats, particularly in biodiversity-sensitive areas like EU protected zones (Natura 2000). The Group introduces innovative solutions during the tender phase of its projects to enhance biodiversity protection.

This approach combines thorough environmental impact assessments, specialised staff training, and partnerships with environmental experts. On projects with a high risk on biodiversity, the BESIX teams implement specific measures to protect wildlife and nature.

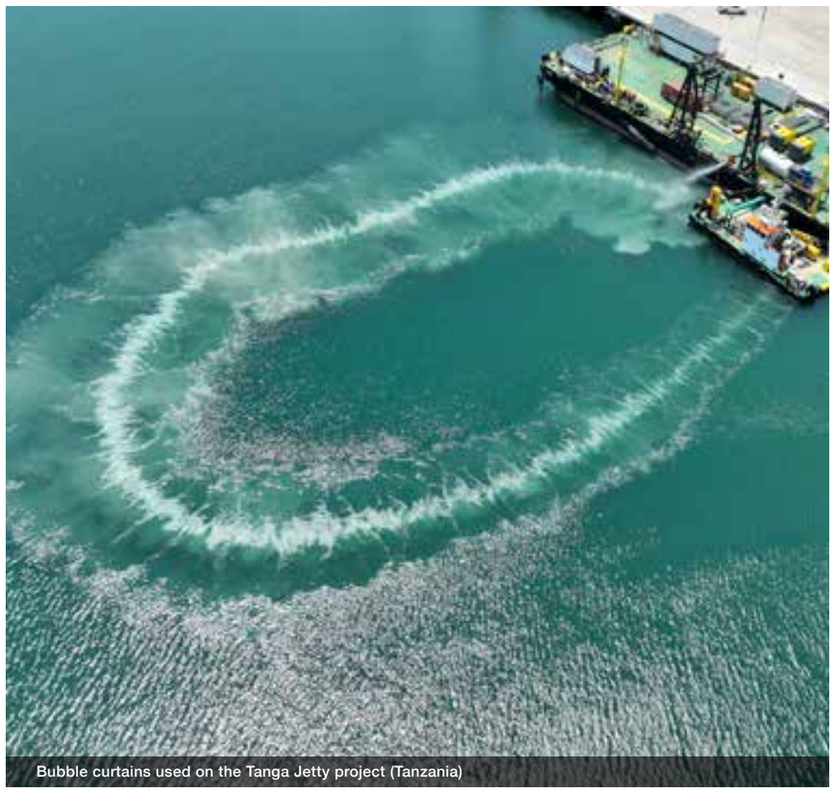
New standards for construction site installation

BESIX Watpac developed a Sustainable Site Setup Guide, providing its teams with practical solutions for establishing sustainable site facilities, addressing essential project setup considerations and selecting sustainable equipment and methods. This guide outlines best practices in accordance with current industry standards, ensuring that environmental impacts are minimised while also identifying potential cost-saving opportunities.

The guide promotes innovative approaches, including sustainable technologies, such as solar-powered generators and energy-efficient site offices. Meanwhile, in the Netherlands, BESIX developed "10 Rules for a Sustainable Site". After successful pilot implementations, both documents are being prepared for a Group-wide roll-out as from 2025.

Marine ecosystems

Marine protection receives special attention in BESIX's coastal projects. The Group follows strict International Maritime Organization (IMO) and MARPOL (International Convention for the Prevention of Pollution from Ships) standards, working with marine biologists and oceanographers to protect ocean life. Its comprehensive marine mammal protection system includes visual observation, acoustic monitoring, and innovative technologies like the use of a bubble curtain – an air barrier that reduces underwater noise from construction activities. Launching girder system are being used to minimise the disturbance to the fauna and flora. Bubble curtains are used on site projects, and a team of mammal observers is involved whenever conditions require it.


Bubble curtains used on the Tanga Jetty project (Tanzania)

Wildlife protection

BESIX's wildlife protection initiatives extend to land-based projects as well. Fauna and flora management plans and noise and vibration management plans are implemented. Specific measures include wildlife fencing, timing of construction to avoid sensitive breeding periods, noise reduction during foundation work, visual mitigation for birds, collaboration with ecologists and monitoring programmes, and bat surveys prior to tree felling. The BESIX teams also actively prevent protected species from nesting on site.

On-land measures include installing insect hotels (for instance on the Nordhavn Tunnel project in Denmark), and the protection of various species of animals (gazelles, foxes, ospreys, Socotra cormorants, turtles…) with on-land fauna monitoring (for instance on the Abu Dhabi Guggenheim museum project in the UAE).

Across the EU and globally, invasive species are a threat to biodiversity, habitats and human health. The Group faces the presence of invasive species in its projects, in Europe, the Middle East and on the international market. BESIX teams have gained experience in various management techniques: employee training and equipment control, as well as preventive measures like excavation, seed control and natural parasite use.


Mammal observer on the Tanga Jetty project (Tanzania)

Focus on water conservation

Water conservation forms another crucial part of BESIX's environmental strategy. The Group has implemented advanced water-saving techniques, including sedimentation tanks for treating concrete wash water and portable treatment systems with CO_2 injection for pH neutralisation. These systems ensure that water released into the environment meets strict quality standards.

Beyond construction sites, BESIX provides advanced environmental solutions to its clients. Its expertise extends to wastewater and drinking water treatment plants, pumping stations, and hydroelectric installations, treatment capacity upgrades, sludge drying and valorisation (digestion, biogas re-use…), and the polishing of treated effluent to near potable water standards (ultrafiltration, reverse osmosis…).

Circularity and managing resources responsibly

BESIX embraces circular economy principles, prioritising waste prevention over disposal. The Group helps clients explore sustainable options like urban mining, green concrete, and innovative business models that preserve material value throughout the construction lifecycle.

BESIX's comprehensive waste management approach includes dedicated sorting areas for different materials, special protocols for hazardous waste handling, composting facilities for organic waste, and wastewater treatment.

De Gavers water production centre (Harelbeke, Belgium)