

Press release

Beveren-Kruibeke-Zwijndrecht
14 october 2025

ECLUSE Scheldt Tunnel Completed: Belgium's longest microtunnel is now a reality

Work on extending the ECLUSE steam network from the left to the right bank of the Scheldt has reached a major milestone. The tunnel that will carry the pipelines beneath the river has now been completed. On Tuesday 14 October, Flemish Minister for Energy and Climate Melissa Depraetere visited the site to inaugurate this technical achievement. In the coming months, the tunnel will be equipped to house the steam pipelines that will transport energy recovered from Indaver and SLECO's waste-to-energy facilities on the left bank to the first customer on the right bank, Evonik. Once operational, this connection will avoid an additional 100,000 to 150,000 tons of CO₂ emissions per year – an important step towards a low-carbon energy supply for the Port of Antwerp.

A technical feat

Construction of the ECLUSE tunnel began in March 2024, following years of preparation and careful planning. Through this tunnel, ECLUSE will transport steam generated from the waste-to-energy facilities in Doel to Evonik. The tunnel marks a significant expansion of the existing ECLUSE network, which has been supplying five companies in the Waaslandhaven with process steam since 2019.

With a length of 1,288 meters, this is the longest microtunnel ever constructed in Belgium. The tunnel has an internal diameter of three meters. It accommodates the ECLUSE 2 pipelines, a central maintenance path, and additional space for future pipelines and cables. The tunnel was constructed using microtunneling, a trenchless technology suited for diverse soil types and ideal for crossings beneath roads, railways, and rivers. The boring itself lasted 14 weeks and progressed entirely according to plan. Where an average advance of 70 meters per week had been expected, the final average reached an impressive 92 meters per week.

Waste-to-energy supplies steam for chemical processes

During the incineration of waste in the waste-to-energy facilities of Indaver and SLECO in Doel, the flue gases are used to generate steam. Since 2019, this steam has been delivered directly to five neighboring companies in the Waaslandhaven, who use it according to their needs in their chemical processes.

The steam is transported at a constant pressure of around 40 bar and a temperature of approximately 400°C. With the expansion across the Scheldt and the connection of



Gefinancierd door
de Europese Unie
NextGenerationEU

Evonik to the network, the share of steam that is directly used in industrial processes will increase significantly. Evonik has a large steam demand at its Antwerp site. Today this demand is partly met by burning natural gas. By connecting to the ECLUSE network, Evonik can substantially reduce its natural gas consumption. This reduction is equivalent to the annual use of more than 38,000 households. By using steam from ECLUSE, Evonik will also avoid annual emissions of 100,000 to 150,000 tons of CO₂. By doing so, ECLUSE actively contributes to the energy transition in the port of Antwerp and the achievement of climate targets.

Ivan Pelgrims, Managing Director, Evonik Antwerp NV:

“Connecting to the ECLUSE network marks a turning point in our climate strategy. By meeting our steam demand largely with low-carbon energy from waste-to-energy, we are taking a major step towards our goal of 55% CO₂ reduction by 2030. This project shows how industrial cooperation and technological innovation go hand in hand to achieve the climate objectives of Flanders and Europe. Evonik is proud to be the first customer on the right bank to contribute to a more sustainable industrial ecosystem in the Port of Antwerp.”

“As Minister of Climate and Energy, I believe it is extremely important for companies to actively participate in the energy transition. The Ecluse tunnel under the Scheldt proves that investments in sustainable energy are good for both the climate and our industry. It makes companies less dependent on fluctuating natural gas prices in geopolitically unstable markets. And it anchors our energy-intensive industry towards a fossil-free future. That, in turn, is good for preserving our jobs. We will continue to encourage projects like this one,” said **Flemish Minister for Energy and Climate Melissa Depraetere**.

Boudewijn Vlegels, Chairman Maatschappij Linkerscheldeover, on behalf of

ECLUSE: “Thanks to the unique mix of public legitimacy and private strength, the ECLUSE network in the Waaslandhaven is now, only a few years after the first steam deliveries, being expanded to the port on the right bank. By doing so, the Port of Antwerp, as the largest industrial cluster in the region, is actively contributing to the energy transition.”

Next steps

With the completion of the tunnel under the Scheldt, an important milestone has been reached, but the works are not yet finished. In the meantime, a second, shorter boring of 185 meters under the Scheldelaan towards Evonik on the right bank has also started. This boring, which will take about four weeks, crosses the Scheldelaan and railway tracks. In parallel, preparations are ongoing for the installation of the support structures on which the pipelines will later be mounted. Completion of the full project is scheduled for the end of 2026.

The ECLUSE tunnel is being realized through cooperation between private and public partners: Indaver, SLECO, FINEG, Maatschappij Linkerscheldeover, and Port of Antwerp-Bruges, with the support of the Flemish government.

Information about ECLUSE

ECLUSE is a public-private partnership between Indaver & SLECO, Maatschappij Linkerscheldeover, FINEG, and Port of Antwerp-Bruges. The network, originating in the Waaslandhaven, was named "ECLUSE," French for "lock" because it sends steam from a waste-to-energy plant to the businesses in the port. This ambitious, super strategic project enhances the sustainability of the energy supply in the port of Antwerp and anchors the industry in the region. www.ecluse.be

Information about Evonik

Evonik goes beyond the boundaries of chemistry with its combination of innovative strength and leading technological expertise. The global chemical company, headquartered in Essen, Germany, is active in more than 100 countries and generated sales of €15.2 billion and earnings (adjusted EBITDA) of €2.1 billion in 2024. The common motivation of the approximately 32,000 employees: to provide customers with a decisive competitive advantage with tailor-made products and solutions as a superforce for industry, thereby improving people's lives. In all markets. Every day. Evonik Antwerpen is with 9 production plants and almost 1,000 employees one of the largest sites of the group.

<https://www.evonik.click/antwerpen>

Press contacts

- ECLUSE: Lise Peeters, Expert marketing & communication ECLUSE, +32 499 47 32 64, lise.peeters@indaver.com
- Evonik: Danny Erreweyaert, Communications Manager Evonik Antwerpen +32 495 28 01 42, danny.erreweyaert@evonik.com



Gefinancierd door
de Europese Unie
NextGenerationEU