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ESG Impact Deal of the Year – Hafslund Celsio, Oslo

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Hafslund Celsio's full-scale carbon capture and storage (CCS) project in Oslo was chosen by the independent panel of judges to win the IJGlobal ESG Impact Deal of the Year for 2025.

One of the judges said it was a "really impressive project and a well-structured submission… a real contender on many levels" with another adding that it was "good to see CCS viability for EfW progressing".

Yet another judge said: "The NOK9.5 billion financing for Hafslund Celsio – the Norwegian district heating and cooling company in Oslo – covers a municipal waste-to-energy project with a commitment for full decarbonisation through carbon capture and storage.

"This deal decarbonises Oslo and Norway, with the potential to serve as a model for other waste-to-energy facilities."

Hafslund Celsio – owned by Hafslund (60%), Infranode (20%) and HitecVision (20%) – reached FID on a NOK 9.5 billion CCS retrofit at its Klemetsrud WtE facility in Oslo.

The project targets future net-negative emissions by capturing 350,000 tonnes of CO2 annually – including 150,000 tonnes of biogenic CO2 – and eliminating Scope 1 emissions upon commissioning.

The captured CO2 will be transported via electric trucks to a dedicated terminal before offshore storage via the Northern Lights network.

The facility treats 366,000 tonnes of municipal waste annually and supplies 30% of Oslo's district heating.

The project is backed by Hafslund, Infranode and HitecVision and supported by the Norwegian government and the City of Oslo. Offtake contracts with Microsoft and Frontier underpin its commercial viability.

Infranode played a central role in structuring the project to align with energy transition goals. As an active owner, the fund manager co-developed the financial model combining government support with verified carbon removal contracts ensuring the project reached final investment decision.

The Klemetsrud CCS project is the world's first municipal WtE facility to reach FID for a full-scale CCS retrofit, setting a precedent for ESG innovation in hard-to-abate infrastructure.

Celsio signed long-term agreements with Microsoft and Frontier covering around 85% of captured volumes through to 2040. This is the first time engineered carbon removals from municipal waste incineration have been priced, verified, and integrated into a commercial project structure.

The project blends state-backed capex and opex support with commercial carbon removal contracts. This reduces financial risk while monetising climate benefits, creating a replicable financing architecture for climate-positive infrastructure.

The full CCS chain – from flue gas capture to transport to offshore storage – is located within Oslo. CO2 will be moved by electric trucks to a custom-built port terminal, proving that CCS can be deployed in dense urban environments with minimal disruption.

SLB's Just Catch 400 system is a pre-engineered, skid-mounted solution tailored for space-limited retrofits. Its compact footprint and scalable design allow integration into existing plants with minimal downtime.

The NOK 9.5 billion ($842m) project is funded through a three-pillar structure—state support, municipal investment, and private capital—demonstrating how cities, governments, and institutional investors can jointly finance decarbonisation at scale.

Together, these innovations provide a new blueprint for embedding climate transition into essential infrastructure.