

Project News

Consortium signs Project Development Agreement for Waste-to-Chemistry Facility in Rotterdam

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A consortium of companies comprising Air Liquide, AkzoNobel Specialty Chemicals, Enerkem and the Port of Rotterdam has signed a project development agreement covering initial investments in an advanced waste-to-chemistry facility in Rotterdam. The facility will be the first of its kind in Europe to provide a sustainable alternative solution for non-recyclable wastes, converting waste plastics and other mixed wastes into new raw materials.



Enerkem Westbury: a demonstration facility focused on innovation (photo: Sylvie Trepanier).

The initial investments, which cover detailed engineering, the setup up of a dedicated joint venture and completing the permitting process, will be worth EUR 9 million. The consortium aims to take the final investment decision (FID) for the estimated EUR 200-million project later in 2018 and has appointed Dutch

Rabobank as the lead advisor for the financing process. Realization of the project is supported by the Dutch Ministry of Economic Affairs & Climate policy, which have agreed to develop mechanisms and regulation that will help bring this new technology to full scale to support the low-carbon transition of the Dutch economy. The waste-to-chemistry project is also supported by the City of Rotterdam, the Province of Zuid-Holland and InnovationQuarter, the regional development agency. The facility will convert up to 360,000 tons of waste into 220,000 tons (270 million litres) of 'green' methanol. As an equivalent, this represents the total annual waste of more than 700,000 households and represents a ${\rm CO}_2$ emission savings of about 300,000 tonnes."This is an important milestone for the project and a significant step toward implementing a sustainable and circular chemical industry," says Marco Waas, Director RD&I at AkzoNobel Specialty Chemicals, who leads the consortium's Steering Committee. "The agreement comes at a very appropriate time given the current challenges in plastics recycling in Europe. We can convert non-recyclable waste, into methanol, an essential raw material for many everyday products, including low carbon transportation fuel. Not only can this be used in the existing supply chains and replace fossil sources, but it also avoids CO2 emissions otherwise produced by burning waste. "The facility will be built within the Botlek area of the Port of Rotterdam using Enerkem's proprietary technology, and will convert nonrecyclable mixed waste, including plastics, into syngas and then into clean methanol for use in the chemical industry and for the transportation sector. Today, methanol is generally produced from natural gas or coal. The plant will have two production lines, or twice the input capacity of Enerkem's commercialscale plant in Edmonton, Canada. It will benefit from the state-of-the-art infrastructure available within the Port of Rotterdam, as well as synergies with Air Liquide (large industries) for supplying the required oxygen and together with AkzoNobel, the raw material hydrogen. AkzoNobel also acts as a customer for the methanol."This is another exciting and important step getting us closer to launching the construction of our very first advanced biorefinery facility in Europe in 2018," says Vincent Chornet, President and Chief Executive Officer of Enerkem. "As part of this innovative consortium, Enerkem will be the technology provider, lead contractor as well as an equity partner in the project." More information on **Enerkem**