

News release

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AkzoNobel and partners to explore use of waste as chemicals feedstock

AkzoNobel is part of a major Dutch partnership working with Canada's Enerkem to explore the use of waste streams as a feedstock for chemical production and the development of waste-to-chemicals facilities.

The collaboration features a number of industry and semi-governmental partners looking to benefit from Enerkem's proprietary technology that converts waste into synthesis gas – a common starting material for products such as methanol and ammonia.

"Given the growing concerns over raw material and energy scarcity – the need to innovate and develop less traditional solutions is becoming ever more important," said Werner Fuhrmann, AkzoNobel's Executive Committee member responsible for Specialty Chemicals.

"To accelerate these innovations we are entering into strategic partnerships, all focused on replacing non-renewable raw materials, which could have major environmental benefits."

Aimed at closing the loop by converting waste back into useful products, the initial partners are AkzoNobel, Enerkem, the investment and development agency for the Northern Netherlands (NOM), Groningen Seaports, Rotterdam Partners and InnovationQuarter. The partners plan to test various local waste streams, including residual municipal and agricultural waste.

"By making synthesis gas from waste, we will have a sustainable and cost-effective feedstock for the chemical industry which would be fully in line with our Planet Possible approach to sustainable manufacturing," explained Peter Nieuwenhuizen, AkzoNobel's Director of Innovation and Partnerships.

Vincent Chornet, President and CEO of Enerkem, added: "We are pleased to be working with AkzoNobel and partners to further demonstrate Enerkem's ability to recycle the carbon contained in non-recyclable waste into renewable chemicals. These chemical building blocks hold countless potential applications, and with our combined efforts to develop waste-to-chemicals facilities in Europe, the shift towards a circular economy now appears to be truly within reach."

Waste remains a problem in many regions and is generally regarded as being under-utilized for the production of chemicals. The advantage of Enerkem's proven conversion process is that it is complementary to existing technologies, such as recycling and anaerobic digestion.

The goal is to create a group of partners that all make a unique contribution – waste management companies to provide the waste feedstock and processing capacity, financial parties to arrange funding, end-use chemical companies to handle production and customer



sales, and government to facilitate regional investment. Other interested parties are also welcome to join the collaboration.

Within the next two to three years, the partners are aiming to have a plant in Delfzijl or Rotterdam (or both) become the first in Europe to utilize the new technology.

Not for publication - for more information

AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. We supply industries and consumers worldwide with innovative products and are passionate about developing sustainable answers for our customers. Our portfolio includes well-known brands such as Dulux, Sikkens, International and Eka. Headquartered in Amsterdam, the Netherlands, we are consistently ranked as one of the leaders in the area of sustainability. With operations in more than 80 countries, our 50,000 people around the world are committed to delivering leading products and technologies to meet the growing demands of our fast-changing world.

About Enerkem:

Enerkem makes biofuels and renewable chemicals from waste. With its proprietary technology, Enerkem converts non recyclable municipal solid waste into methanol, ethanol and other widely used chemical intermediates. Headquartered in Canada, Enerkem operates both a demonstration plant and a pilot facility in Quebec and is beginning operations at Enerkem Alberta Biofuels, its first full-scale commercial facility. The company is developing additional biorefineries in North America and globally, based on its modular manufacturing approach. Enerkem's technology and facilities help diversify the energy mix and make everyday products greener while offering a sustainable alternative to landfilling and incineration. www.enerkem.com

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