Imerys and E.ON sign a long-term partnership agreement for the recovery of energy in Willebroek

Mechelen/Willebroek, 21st June 2023 – E.ON launches a large investment for the construction of an energy recovery plant at Imerys’ production site in Willebroek, Belgium. The production of syngas from Imerys will be used as an energy source for the new power plant. Thanks to the exhaust gas treatment system, emissions will be heavily reduced resulting in significantly improved air quality. The new E.ON power plant – with a capacity of up to 29 MW_e – will produce sufficient electricity to supply the Imerys site and 40,000 families in the region all year round.

Imerys is the world leader in the production of high-performance conductive additives that are essential for lithium-ion batteries and technical polymer applications. Following the rapid development of e-mobility and the increasing demand for lithium-ion batteries globally, Imerys recently decided to expand its production capacity of high-purity carbon black in Belgium from two to four production lines. Carbon black’s high electrical conductivity is needed to improve the performance and lifetime of lithium-ion batteries. The production process releases heat and generates significant amounts of syngas. The syngas, which contains high concentrations of hydrogen and carbon monoxide, is currently flared with a loss of its energy content.

E.ON will build on the Imerys site a state-of-the-art energy recovery plant to fully valorize and recover the energy content of syngas by producing steam. The unit will generate electricity in a high-efficient steam turbine with a capacity of up to 29 MW_e. In addition to supplying Imerys’ local needs, the electricity generated by the new plant will be delivered to the public grid and covers the equivalent consumption of 40,000 households. In the future, E.ON will also explore the possibility to recover the residual heat of the power plant as a source for a potential district heating network.

The energy recovery plant will be built, owned and operated by E.ON Power Plants Belgium, a 100% subsidiary of E.ON SE. The start of commercial operation of the plant is scheduled for the second half of 2025. The supply of electricity to Imerys is secured by a long-term partnership agreement between the companies.

“The project represents a step change in the sustainability of carbon black production at Willebroek and aligns with Imerys’ ambitions to improve environmental stewardship throughout our operations. We are pleased to partner with E.ON to bring this to fruition for the benefit of the Willebroek plant, the environment and the local community” said Frank Wittchen, Division Graphite & Carbon VP & GM, Imerys.
Manfred Wirsing, Managing Director of E.ON Energy Projects concluded: “Together with Imerys, we will improve the energy efficiency of the production site. As the produced carbon black is primarily used for lithium-ion batteries, the environment benefits on the one hand due to its importance in the transition towards e-mobility and on the other hand by the generation of power by the recovery of energy from the off-gasses – a double win for the environment. I am pleased that with this exemplary project we are fully aligned with the growth strategy of E.ON and helping to decarbonize our customers’ operations and processes with sustainable solutions.”

Positive environmental impact
Both Imerys and E.ON attach great importance to sustainability. The power generated by the energy recovery plant reduces the need for conventional power generation, providing a saving of more than 25,000 tons of CO₂ per year (based on the average CO₂ emission of power generation in Flanders). The project will also contribute to improved air quality locally by reducing sulfur and nitrogen emissions thanks to an exhaust gas treatment unit (e.g. DeNOₓ, and DeSOₓ systems).

About Imerys
The world’s leading supplier of mineral-based specialty solutions for industry with €4.3 billion in revenue and 14,000 employees in 2022. Imerys delivers high value-added, functional solutions to a great number of sectors, from processing industries to consumer goods. The Group draws on its understanding of applications, technological knowledge and expertise in material science to deliver solutions by beneficiating its mineral resources, synthetic minerals and formulations. Imerys’ solutions contribute essential properties to customers’ products and their performance, including heat resistance, hardness, conductivity, opacity, durability, purity, lightness, filtration, absorption and water repellency. Imerys is determined to develop responsibly, in particular by fostering the emergence of products and processes with lower environmental footprints.

About E.ON
E.ON is an international investor-owned energy company headquartered in Essen, Germany, which focuses on energy networks and customer solutions. As one of Europe's largest energy companies, E.ON plays a leading role in shaping a clean, digital, decentralized world of energy. To this end, around 72,000 employees develop and sell products and solutions for private, commercial and industrial customers. More than 47 million customers purchase electricity, gas, digital products or solutions for electric mobility, energy efficiency and climate protection from E.ON. For more information, please visit www.eon.com.

E.ON Power Plants Belgium is specialized in the development, construction, financing and operation of installations for the local production of electricity and heat. From its office in Mechelen, E.ON focuses primarily on energy solutions for larger industrial customers. E.ON Power Plants Belgium currently operates installations at Oleon in Ertvelde, at Promat (Etex Building Performance) in Tisselt and at Dow Benelux in Terneuzen. For more information, please visit www.eon.be.

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Attachments:
1. Signing photo,
2. Group photo, from the left to the right:
   • Mark Winkelmans (Site Manager, Imerys Graphite & Carbon Belgium)
   • Gerritjan Van Der Ven (Industrial Director, Imerys Graphite and Carbon)
   • Nicolas Godot (Project Director, Imerys Graphite and Carbon)
   • Fabrice Zuddas (Industrial Projects Group Vice President, Imerys)
   • Frank Wittchen (Vice President & General Manager, Imerys Graphite and Carbon)
   • Martin Hofman (Managing Director, E.ON Power Plants Belgium)
   • Andrea Bertoletti (Project Manager, Imerys Graphite & Carbon)
   • Manfred Wirsing (Managing Director, E.ON Energy Projects)
   • Pieter Blommaert (Project Manager Realization, E.ON Power Plants Belgium)
   • Philipp Lattner (Senior Project Manager Implementation, E.ON Energy Projects)
   • Tim Buyens (Team Lead HSE & Realization, E.ON Power Plants Belgium)
   • Michaël Gay (Project Manager Development, E.ON Power Plants Belgium)
3. Impression of the energy recovery plant
   Plants impression based on current 3D drawings