

Agfa advances sustainable innovation through strategic collaboration with VITO and EU funding for green hydrogen production

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Agfa is accelerating sustainable technology advancements for ZIRFON membranes:

- **Agfa strengthens its collaboration with renowned research and technology organization VITO for the development of a new generation of separator membranes for alkaline water electrolysis**
- **Agfa's ZIRFON membrane production unit gains momentum thanks to EU Innovation Fund Grant and environmental permit**

Strategic research collaboration

Agfa will continue its collaboration with VITO, a global technology development center, to pioneer a new generation of separator membranes for alkaline water electrolyzers. Agfa and VITO have a rich shared history within this field, which resulted in the commercial launch of the first generation of ZIRFON membranes in 2007.

Within their extended collaboration, VITO will work with Agfa on developing novel porous gas separator membranes to improve electrolyzer performance and reduce overall hydrogen production cost. Agfa and VITO will actively pursue funding opportunities to further boost their joint research, including Belgian federal (e.g. Clean Hydrogen for Clean Industry) and regional (e.g. VLAIO) calls.

EU funding for membrane production plant

Concurrently, Agfa has been awarded an 11 million Euro grant from the prestigious EU Innovation Fund for its GIGA-SCALES project. This funding will act as a driving force for the establishment of Agfa's pioneering industrial-scale ZIRFON membranes production plant in Mortsel, Belgium. These cutting-edge membranes are deployed as separators in alkaline water electrolyzers, revolutionizing green hydrogen production. The production plant's entry into operation is foreseen for October 2025.

With over 100 companies worldwide already utilizing ZIRFON membranes for large-scale hydrogen projects, Agfa is rapidly expanding its production capacity. The upcoming industrial unit will be able to produce membranes representing 20 gigawatt per year of alkaline water electrolysis (corresponding to an annual reduction of 15 million tonnes of CO₂ emissions for each 20 GW delivered). The scale at which ZIRFON will become available allows the worldwide deployment of water electrolyzers, which are at the heart of the green hydrogen economy.

Agfa recently secured the **environmental permit** from the local authorities for the new ZIRFON production plant. It will be designed for future extensions that ensure scalability according to market demands.

Agfa's CEO Pascal Juery commented: "We are dedicated to bringing innovative technology to contribute to the EU's mission for a carbon-neutral future. We have therefore prolonged our strategic collaboration with VITO. Our ZIRFON membranes business grew exponentially in 2023 and we are honored that the EU Innovation Fund decided to support our plans with an 11-million-euro grant. Furthermore, as we

obtained all environmental permits, we are confident that the plant will be operational by October 2025 to be ready for the expected further increase in customer demand.”

VITO’s CEO Inge Neven commented: “Hydrogen plays an important role in the transition towards cleaner and more sustainable energy sources. We are developing materials that enable safe and cost effective production of hydrogen. Agfa is a partner with a proven track record to bring these new materials successfully to the market. We are looking forward to the continued collaboration.”

About ZIRFON

Green hydrogen production involves water electrolysis, a process using green electrical energy to convert water into oxygen and hydrogen, which are then kept separate by a membrane. Zirfon membranes, employed in advanced alkaline electrolysis, are renowned for their consistently high productivity and durability under dynamic operating conditions, enhancing the efficiency and reliability of electrolytic systems, while limiting maintenance.

The unparalleled efficacy of ZIRFON membranes in green hydrogen production is demonstrated by their exceptional productivity, four times higher than conventional membranes while also allowing safe intermittent operation of the electrolyzer, enhancing electrolytic systems’ efficiency and reliability.

Learn more at www.agfa.com/zirfon and www.agfa.com/corporate/newzirfonplant/

About the EU Innovation Fund

[The Innovation Fund](#), financed by [EU Emissions Trading System revenues](#), is one of the world’s largest funding programmes for the demonstration of innovative low-carbon technologies. The Fund focuses on highly innovative clean technologies and big flagship projects with European added value that can bring significant emission and greenhouse gas reductions.”

The Innovation Fund is a key funding instrument for delivering the EU’s economy-wide commitments under the Paris Agreement and the climate and energy priorities put forward in the [REPowerEU Plan](#), the [Hydrogen Bank](#), the [Green Deal Industrial Plan](#) and the [Net-Zero Industry Act](#).

About VITO

VITO is the reference for independent, applied technological research to generate a positive impact for a society in transition. Scientifically based, driven by collaboration and solution-oriented. It combines its domain knowledge of people and environment with technological innovations, (pilot) infrastructure and digital applications.

In this way VITO realizes a measurable effect for citizens, industry and policy in Flanders, Europe and the world, for its three impact domains: sustainable use of raw materials (circularity-bio-economy, energy and water), climate mitigation and adaptation, and a sustainable living environment for all. In this way, it can improve the quality of life for all and support the United Nations SDGs. Together for a better future.

About Agfa

The Agfa-Gevaert Group is a leading company in imaging technology and IT solutions with over 150 years of experience. The Group holds three divisions: Radiology Solutions, HealthCare IT, and Digital Print & Chemicals. They develop, manufacture and market analogue and digital systems for the healthcare sector, for specific industrial applications and for the printing industry. In 2022, the Group realized a turnover of 1,857 million Euro.

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