Green Hydrogen Production

ZIRFON: Agfa-VITO Innovation Enabling Large-Scale Green Hydrogen Production





A breakthrough technology for green hydrogen production: ZIRFON membranes, developed by Agfa and VITO, enhance the efficiency of **alkaline water electrolysis**, a key process in **green hydrogen production**. This innovation enables large-scale hydrogen generation while significantly reducing CO₂ emissions.



RTO knowledge transfer into the market: Agfa and VITO have strategically collaborated to scale up ZIRFON membrane production. With support from the **EU Innovation Fund**, Agfa is establishing an **industrial-scale facility** to meet the growing demand for hydrogen electrolysis membranes.

An advanced manufacturing technology: This new facility will produce membranes for up to 20 GW of water electrolysis annually, contributing to a projected reduction of 15 million tonnes of CO_2 emissions. This advancement strengthens European competitiveness, accelerates the green hydrogen economy, and supports the EU's carbon-neutral mission.



While a membrane is just a small component of an alkaline electrolyser, ZIRFON has a transformative impact on the overall system performance. Through its engineered characteristics, ZIRFON guarantees peak performance at the lowest hydrogen production cost.

A VITO Technology Advanced through Strategic Collaboration

AGFA

Scaling Up with Support from the EU Innovation Fund

Driving the Green Hydrogen Economy with Industrial Impact



ZIRFON: Agfa-VITO Innovation





"Hydrogen plays an important role in the transition towards cleaner and more sustainable energy sources. We are developing materials that enable safe and costeffective 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."



Inge Neven, CEO at VITO