

North Brabant Invests €4 Million to Advance Molten Salt Reactor Technology

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The province of North Brabant is committing nearly €4 million to accelerate the development of next-generation molten salt reactors (MSRs). This significant investment will support a consortium of Dutch technology firms, Thorizon, DEMCON, and VDL Group, in their collaborative PROMOSA project, aimed at validating the manufacturability, safety, and functionality of key components for small modular reactors (SMRs).

The consortium, in partnership with Eindhoven-based DIFFER (Dutch Institute for Fundamental Energy Research), will establish an advanced testing facility to develop and test MSR technologies, which offer a safe, scalable, and sustainable energy solution. The PROMOSA project specifically focuses on developing and testing technologies for the Thorizon One reactor, which has been recognized by the European Commission as a spearhead project for accelerated nuclear reactor development.

Commissioner Martijn van Gruijthuijsen emphasized the strategic importance of this investment, stating, "This investment not only offers opportunities for the manufacturing industry in Brabant but also contributes to an affordable and sustainable energy supply in the future. With our strong high-tech sector and research institutions, we have everything we need to lead this development."

Kiki Lauwers, CEO of Thorizon, highlighted the collaborative nature of the project, noting, "Thanks to the support of the province, we can take the first steps from the drawing board to the realization of parts together with the Brabant manufacturing industry. It's great to do this as a startup with recognized high-tech companies like the VDL Groep and DEMCON."

The PROMOSA project aims to produce working prototypes and a test facility in Brabant within two and a half years, focusing on non-nuclear component development. The province is contributing 50% of the €8 million total project cost, with the remaining funding coming from the participating companies. Thorizon plans to begin construction of its first reactor by 2030.

This investment aligns with the Innovation Coalition "Nuclear Energy for the Future" launched by the province in 2022, and underscores North Brabant's commitment to driving innovation and sustainable development in the energy sector.