PRESS RELEASE

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STORMING First High-Level Expert Group Meeting

The STORMING High-Level Expert Group kick-off meeting took place, with the aim of further developing STORMING solutions.

On 25th of October the STORMING project High-Level Expert Group gathered for the very first time. Eight distinguished experts representing diverse fields within the STORMING value chain, including manufacturing, hydrogen, biomethane, academia, and energy supply, gathered to discover the initial project results and explore the technology's far-reaching potential.

The STORMING project, at the forefront in the development of innovative technologies for (bio)methane cracking, aims to develop novel structured reactors powered by renewable electricity. These reactors will not only boost the conversion process of both fossil and renewable CH4 into CO2-free hydrogen, but also produce highly valuable carbon nanomaterials essential for different applications.

One of the key highlights of the meeting was the interest in addressing critical challenges faced by the technology. Experts engaged in discussions centered around catalyst development, carbon nanotubes, biomethane utilization, hydrogen production, and advanced process engineering.

Central to the STORMING project is the implementation of a smart rational catalyst design protocol. This protocol integrates theoretical (density functional theory and molecular dynamics calculations) and experimental (cluster) studies to engineer innovative Fe-based catalysts. These catalysts are highly active and easily regenerable through waste-free processes, ensuring sustainability at every stage of production. The project also focuses on electrification through microwave or joule-heated structured reactors. These reactors, meticulously designed using computational fluid dynamics and 3D printing, offer precise thermal control, resulting in unparalleled energy efficiency. At Technology Readiness Level 5 (TRL5), the project will validate the chosen catalytic technology, aiming for energy efficiency exceeding 60%, net-zero emissions, and a significant cost reduction of approximately 10% compared to conventional methods.

The collaborative spirit from the High-Level Expert Group meeting marks the beginning of a development journey for the STORMING innovations.

Learn more about the members of the High-Level Expert group in our website: https://storming-project.eu/hle-group/

For more information on STORMING, go to: **storming-project.eu**

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