An interview with Ms. Louise SAMAIN and Mr. Renaud DACHOUFFE

Project developers, TWEED Cluster

What are the key figures of the TWEED cluster?

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Active for 15 years, TWEED created in 2022 the H2O cluster, which is complementary to our initial field of expertise: renewable energy. Today both clusters gather 244 members of the energy and water sectors in Wallonia & Brussels (industrialists, research centers, design offices, universities, etc.), with the mission to pave the way for the setting up and the implementation of high quality and industrial-size projects for sustainable production, exploitation and use of renewable energy & water.

Could you tell us about your priority innovation area devoted to hydrogen?

Launched in November 2022, the Belgian Hydrogen Council brings together the Belgian H2 ecosystem of TWEED (H2HubWallonia) and its Flemish counterpart, WaterstofNet, to create synergy between all regional and federal initiatives on hydrogen. Furthermore, TWEED signed a Convention with Morocco to gather competences around new alcalin electrolysers projects and factories. Eager to maintain Belgium’s competitive advantage in the development of a competitive green H2 value chain, we are considering partnerships between Colruyt, BESIX, and John Cockerill in HyOffWind, together with cross-participation in the boards of TWEED and Waterstofnet.

TWEED is also part of the HYPOP, HYdrogen Public Opinion and acceptance project (2023-2025), which is supporting the hydrogen deployment in Europe, enhancing the involvement of citizens and providing guidelines to increase trust in hydrogen implementation. This axis of innovation is completed by three other axes: Energy Communities on smart grids, renewable heat and Circular Water.

Could you tell us about the SOCCER and AMORCE projects?

They are both subsidized by the Walloon Energy Administration as part of the Living Lab program and the CERACLE portfolio. AMORCE focuses on the pricing of 2 pilot communities (in partnership with ULiège), their socio-economic implications, the implementation of communication protocols, the activation of the electric discharge at the right time, business plans and business models according to the typology of the buildings and networks. A pilot was launched in summer 2023 in Liège.

For its part, SOCCER aims to set up 3 social energy communities in Ans and Verviers and to measure their impact on the inhabitants of social housing. The goal is to make information accessible and to raise awareness about the proper use of energy. The first pilot is running in Ans.

What is the DIS axis 4 “Energy-Building” of the Walloon Smart Specialisation Strategy (S3)?

This axis aims to bring together all the actors concerned and to create a portfolio of projects (and actors) in order to meet the challenges facing the energy and building sectors. With this in mind, the Cluster manages, together with the MecaTech competitiveness cluster, the 4 Strategic Innovation Initiatives (SII) of the DIS 4, part of the 19 SII supported in 2023 by the Walloon Region. Our objective is to bring these 4 SIIs to life, each with a lead partner. This implies linking the priorities of Walloon industry for the next 6 years with future research programming, funding opportunities and calls of projects. These bottom-up methodology should be based on a common roadmap encompassing energy communities, hydrogen, district heating, mobility and building renovation as an integrator of technological solutions, in co-construction with the other four DIS of the Walloon S3 strategy.

What do you see as the main challenges in meeting environmental and sustainable development challenges?

As a key element of the energy transition, renewable heat distribution plays a strategic role in reducing CO2 emissions and improving the energy efficiency of European cities. Wallonia has a high potential for deep and medium geothermal capture. Following the 2022 call for projects launched by the Walloon Region (32 projects selected for an amount of €30 million), Wallonia launched another call for projects at the end of 2023 to support the deployment of ambitious district heating projects. 12 projects were selected for nearly €29 million and must be operational by the end of 2026.

By the way, TWEED has launched a new ecosystem, Heat2Net, based on CERACLE’s

portfolio management expertise. It will focus on the whole chain value, with an emphasis on the recovery of waste heat and thermal energy share within industrial sites. Moreover, green gas networks, renewable hydrogen, sustainable energy sharing and management of our water are also at the heart of the short-term issues. The players involved will have to create synergies in order to reduce by 55% our CO2 emissions by 2030, and by 100% by 2050. All innovations are welcome to make Wallonia and Belgium more autonomous and cleaner in energy, now!