

D2GRIDS PROJECT LAUNCH : Rolling out 5G District Heating & Cooling A new Interreg NWE project

D2GRIDS is an acronym for ‘demand driven grids’. This new Interreg North-West Europe (NWE) project, coordinated by Mijnwater Ltd., aims to upscale 5th generation District Heating and Cooling (5G DHC) grids across Europe. Five pilot sites in Paris-Saclay (FR), Bochum (GE), Brunssum (NL), Glasgow and Nottingham (UK) will develop 5G DHC grids. The 20 million EUR project is supported by Interreg funds, covering close to 60 % of the overall budget - 11,6 million euros. D2Grids first kick-off meeting, held in Heerlen, set the stage for three years of intense collaboration among European partners to roll out this proven technology.

What is 5G DHC ?

First developed in Heerlen by Mijnwater Ltd., and in contrary to conventional district heating, this thermal smart grid is based on low temperatures. By a cloud of decentralized heat pumps, located at end-user accommodation, energy is exchanged on the grid, and flows are induced through customer demands. The concept allows large scale utilization of low temperature waste heat, from data centers, supermarkets, industry, etc. The five partner pilot sites aim to connect ca. 50.000 m2 of dwellings and/or commercial buildings to a 5G DHC grid.

Stroomversnelling as innovation platform

Together Stroomversnelling and Mijnwater aim to spread learnings and opportunities in the Netherlands in order to support and inspire other (Low Temperature heat) initiatives in the Netherlands. We share knowledge both ways; for Mijnwater to have a sparring partner and for Stroomversnelling to use insights from the pilots for other initiatives of Stroomversnelling members. Next to that Stroomversnelling leverages its lobby in order to accelerate the D2G pilots.

Mijnwater Ltd is lead partner of this Interreg NWE D2grids project with Herman Eijdens as leading manager of the project. Herman’s vision on 5G DHC : “The energy transition is the major challenge of this era; the 5G DHC concept, as such, is a powerful and affordable strategy to decarbonize building stocks in urban environment all over Europe. In the city of Heerlen we show proven technology and are eager to share our expertise and experiences to accelerate the developments in other areas.”

Attracting stakeholders to roll out the technology

Upscaling the technology - boosted by transnational cooperation - enables the consortium to raise the interest of the industry to develop the right products and reduce the costs by 10-20%. VITO in Belgium is a key project partner for industrializing the 5G DHC concept and to evaluate results. In the Parkstad Limburg region Mijnwater cooperates with Weller Social Housing foundation in order to connect thousands of dwellings during their renovation process.

Moreover, the project will deliver plans to create further similar developments in Parkstad Limburg, North-East France, Luxembourg, Flanders, the Ruhr-area, Scotland and East Midlands (UK). Dedicated education and training programs, will be set up by Open University, a partner in the project bringing in expertise on post-graduate and digital learning. As the investment-level for such a technology must gain interest from large investors (like pension funds). Asper-IM from London will participate by introducing business models and knowledge platforms for the financial markets.

Commissioned by Mijnwater the application was successfully constructed by EUQuest in Heerlen and Grants Europe Consulting in Budapest.

About Stroomversnelling

Stroomversnelling is a non-profit organisation promoting a sustainable build environment. We focus on the transformation of the existing housing stock of the Netherlands. We work together with our members, such as housing associations, contractors, municipalities and utility companies to design and implement practical and scalable solutions. We are successful because of our multi stakeholder approach and by influencing the political debate and legislation.

12 project partners and 7 subpartners

Lead partner



Project partners



Subpartners

