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# **Newsletter #9**

February 2022



## **EDITORIAL**

Looking back on 2021, one can say **it was an amazing year for project D2Grids**. Regardless of constraints imposed by the COVID crisis, we were able to work on **enlarging the 5GDHC community** and roll out the concept of 5GDHC through various activities.

One of the highlights of this year was the **D2Grids mid term conference during COP26 in Glasgow**, where key findings could be shared with the wider public. 2021 was also marked by the **extension of the project as a result of Interreg's 2nd capitalisation call**. A new consortium composed of existing partners as well as new ones, will now work on a better integration of electrical use and local renewable electricity production capacities.

Looking forward, we see 2022 as an important step forward for D2Grids and the promotion of 5GDHC across Europe. As experts go forward with defining the 5GDHC technology, refining its business model and setting the path for its industrialisation, we now have many tools to **support the development of new 5GDHC networks**! All along this upcoming year, many activities are planned to meet stakeholders, experts, end-users, and to demonstrate how 5GDHC can be part of the **solution to decarbonise our cities**: pilot sites visits, videos, events, trainings etc. We will keep you informed through this newsletter and all D2Grids communication channels!

Enjoy your readings,

D2Grids Project Team

# **D2GRIDS NEWS**



Relive the D2Grids conference on 5GDHC at COP26!

#### **D2Grids Project Team**

For COP26, the D2Grids project hosted a side-event dedicated to 5th generation DHC in Glasgow. More than 150 participants attended the conference, both online and onsite! The purpose was to showcase first results in developing the 5GDHC concept and pilot site achievements.

The D2Grids team was truly happy to welcome everyone that joined us during this event! Don't worry if you missed it: the replay is still available!

Watch the replay

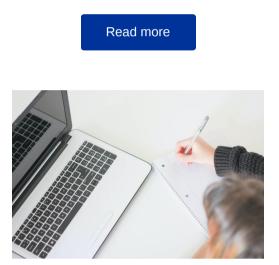


New innovative demonstrator on one of the D2Grids pilot sites

#### **EPA Paris-Saclay**

For our French partner EPA Paris-Saclay, the beginning of this new year was marked by the **installation of an advanced thermal demand management demonstrator** on the 5th generation heating and cooling grid.

This first experimentation is intended to be a test phase that will allow the **deployment of the device on a larger scale** in all the housing units of the campus.



NETEDNE DE GAP26

[Video] French social housing company Segens joins D2Grids!

#### Greenflex

Following the 2nd Interreg NWE call for capitalisation, **Seqens has joined the D2Grids project!** This French social housing company will work **on bringing photovoltaic electricity** produced on one of its future buildings to the Paris-Saclay **energy loop.** The arrival of this new partner will enable the D2Grids project to **go even further in decarbonisation.** 



A look back on partners' workshop on 5GDHC market transformation potential

**Open Universiteit** 

D2Grids and its fellow partners organised online workshops in order to get a **comprehensive viewpoint** on the potential of 5GDHC technology to transform the market of heating and cooling in Europe. Through brainstorming sessions, these workshops aimed to define **objectives and indicators** to assess the potential of the technology.

All those inputs will allow to establish a relevant methodology to facilitate further implementations. **The project report will be publicly available soon!** 

Read more

## **HEATING AND COOLING GRIDS IN EUROPE**





An innovative district heating and cooling grid in Genk!

#### Vito/Energyville

In Belgium a **new district heating and cooling network has been installed** in the "Open Thor living lab", a European innovation cluster located in Genk.

This highly innovative low-temperature heating and cooling network **complies with the principles defined by D2Grids and 5GDHC standards!** 

Read more

#### EZK Energy Award

#### **Mijnwater Energy B.V**

D2Grids lead partner Mijnwater Energy B.V has been **nominated for the EZK Energy** Award 2021!

The award honors organisations that **excel** in the field of energy saving, sustainable energy production or the use of renewable heat.

Discover the interview of Herman Eijdems in this application video!

Watch video [ENGLISH SUB]

## **MEET THE PARTNERS**

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To reach carbon neutrality by 2050, every effort must be made to decarbonize cities consumption of heating and cooling. 5GDHC are one of the most sustainable solutions, which can and need to be combined with massive building retrofit to reduce its consumption of fossil energy to the lowest.

GreenFlex is one of the technical expert partners in charge of developping a standardized technological model for 5GDHC and assist the different pilot sites to make the best choices for their demonstrators.

# Mathilde Henry

Project Manager at GreenFlex





### AGENDA



[Wednesday 11 – Friday 13 May 2022] EM-Power Europe & Intersolar

[Monday 27 – Tuesday 28 June 2022] Flexcon 2022

[Tuesday 13 – Wednesday 14 September 2022] Smart Energy Systems International Conference

[Monday 17 – Friday 21 October 2022] European Geothermal Congress 2022

## **PUBLICATION**



Handbook for the implementation of low temperature district heating

(Final report of IEA DHC Annex TS2 | Implementation of low temperature district heating system)

#### IEA DHC

This guide intends to provide concrete information that will facilitate the introduction of low temperature district heating systems.

A significant transformation of basic district heating technology can be achieved, and will **lead to an efficient elimination of the use of fossil fuels** for heating buildings.

LOW-TEMPERATURE DISTRICT HEATING IMPLEMENTATION GUIDEBOOK



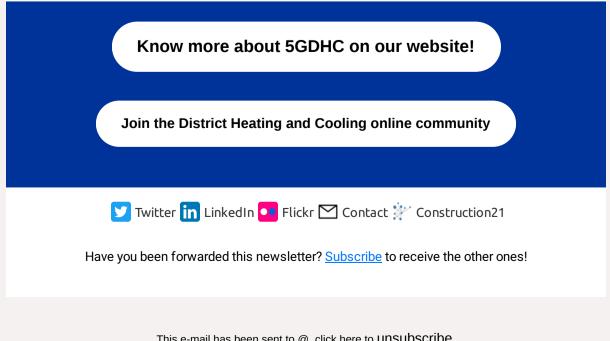


Read more

# **ABOUT D2GRIDS**

The 5th generation district heat and cold grid (5GDHC) was first developed in Heerlen, Netherlands, by Mijnwater Energy Ltd. In contrast to traditional district heating, it is an **intelligent thermal network** based on a **local low temperature loop**. Decentralised energy production, using heat pumps located at the user's premises, allows energy exchange on the network, where flows are **demand-driven**. This concept allows **the recovery of cold and heat emitted by supermarkets**, **data centers**, **factories**, **offices etc**.

D2Grids stands for "demand-driven grids". It is an Interreg Northwest Europe (NWE) project that runs for more than 4 years (2018-2023). Mijnwater Ltd, based in the Netherlands, is coordinating the project with **15 other main partners and 6 secondary partners. Five pilot sites** located in France, Germany, Netherlands and United Kingdom will develop 5GDHC networks.



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