



Editorial

Today, as a large part of the world's population is slowly recovering from a major health crisis with major the economic consequences, key questions arise. **How can we prepare for tomorrow? How can we ensure that the necessary economic recovery is also a green and low-carbon recovery?**

At the level of cities and neighbourhoods, decarbonising the way we heat and cool ourselves is a key step. And 5th generation heating and cooling networks can play a major role in this respect. The current health crisis will necessarily have an impact on our project's developments, but we are more convinced than ever that **this innovative technology should be one of the solutions to be put forward for a greener recovery.**

It's now been more than a year since the D2Grids adventure was launched. Our project for the development of 5th generation heating and cooling networks is starting to reap its first fruits: [first expertises for the deployment of 5GDHC on pilot sites](#), [heat pump installations in Brunssum](#), publication of a [case study on Mijwater's business model in Heerlen](#). In Nottingham, the Coal Authority is ready to undertake a [mine energy study on one of the project's pilot sites](#), while in Flanders, one of the "follower regions" of the project, [Thor Park promises to be a major centre for energy experimentation, particularly for 5GDHC](#).

In these trying times, when many professionals have to stay at home, multiple online resources, webinars or remote conferences have emerged. [The D2Grids team has selected some of them dealing with heating and cooling grids](#), which will allow you to discover these innovative concepts in more detail, remotely and free of charge.

And to stay connected, don't forget to join our [online community on 5GDHC!](#)

Enjoy your read.

The D2Grids Project Team

Online resources on district heating

Discover District heating and cooling from your couch! The D2Grids project team has gathered online resources and videos for you:



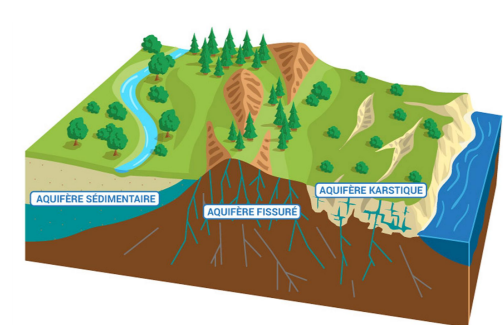
[Watch videos](#)

Webinars

A selection of webinars on heating and cooling networks, available online and offered by different stakeholders from the energy sector.

These videos will enable you to better understand district heating and cooling, but also to grasp their technical specificities and their potential developments.

Expert insight



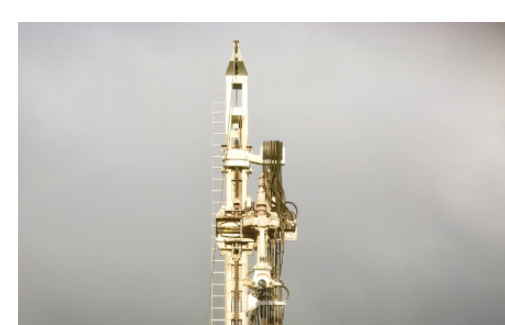
Inter-seasonal heat storage: a solution studied at Paris-Saclay

BRGM

In France, **extensive experimentation** with 5th generation district heating and cooling systems is taking place on Paris-Saclay's pilot site. To this end, BRGM is studying the effects of **variations in water temperature** and carrying out **geochemical and microbiological studies** on the aquifer of Paris-Saclay.

The objective? **Deploying solutions** adapted to storage systems specificities and to the reality on the ground.

[Read more](#)



D2Grids and Nottingham City Council at forefront of exciting future for mine energy in UK

Nottingham City Council

With a strong energy ambition, Nottingham City Council plans to capitalise on its former **mining resources** to achieve carbon neutrality by 2028, taking inspiration from a range of existing projects.

The City Council is commissioning a study from the Coal Authority to assess the potential of the site, which includes **sixty social housing units**: number and depth of seams, flooding rates, etc.

[Read more](#)

News from project partners



Heat pump installations for 5th generation district heating and cooling in the city of Brunssum

Mijwater

Mijwater exports its skills and technology throughout the Netherlands by connecting **three residential areas** in Brunssum that are equipped with a **heating and cooling network**.

The energy plants in each residential area are connected to an **underground heat and cold storage**, but also exchange energy with each other, a great example of a **circular energy system!**

[Read more](#)



Thor Park in Flanders: first sandbox for research and experimentation

EnergyVille/VITO

Thor Park in Genk (Flanders) has announced a big step in the development of a **fully sustainable campus**. This science and technology park has become the **first regulatory demonstrator** for energy in Flanders. As a laboratory for sustainable energy solutions, the site will experiment solutions such as **intelligent control of the heating and cooling system** and **energy storage systems**.

VITO, a D2Grids partner, has joined this project through the European innovation hub **EnergyVille**, which promotes sustainable energy and intelligent energy systems.

[Read more](#)

Business

Asper delivers results of its study on the financing and benefits of the Mijwater project in Heerlen



Asper Investment Management has published a report on the identification and assessment of the **financial risks and benefit characteristics of 5GDHC** in the Mijwater project in Heerlen. This document is part of the work of the European D2Grids project.

[Read the document](#)

District heating in Europe

Amsterdam is experimenting with a district heating network **powered by energy from waste**. Supplied by the **sanitary installations**, this energy source is compatible with **low temperature heating networks**.

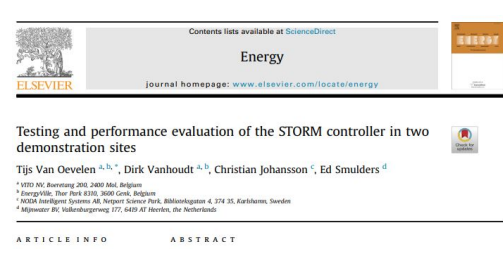
A further step towards the **emancipation of fossil fuels** for the municipality, which aims to **eliminate natural gas** in the city by 2040.

[Read more](#)



Publications

Testing and performance evaluation of the STORM controller in two demonstration sites



EnergyVille/VITO and Mijwater are partners in the STORM project, which aims to **stimulate efficiency** at neighbourhood level using **waste heat, renewable energy sources and storage systems**.

This publication highlights the **controller set up** in the framework of this project on two demonstration sites. The STORM controller is an example of an advanced DHC network controller that allows activating the flexibility from building thermal capacity.

[Read more](#)

Agenda

May 20th:

Webinar: [Digital Heat](#)

May 28th:

Webinar: [5th Generation DHC](#)

July 3rd:

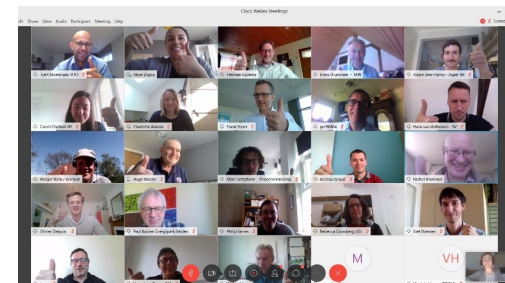
Webinar: [The use of geothermal energy from mine water](#)

August 23 - 29nd:

[8th International DHC+ Summer School in Karlskrona \(Online\)](#)

D2Grids Events

Online Steering Committee #3



Due to the pandemic crisis, the third Steering Committee of D2Grids was held online on April 20-21st.

Two days of online meetings, quite a challenge...but also a fun experience!

About D2Grids

The project "demand-driven grids" (D2GRIDS), funded under Interreg North West Europe (NWE) programme, aims to develop 5th generation urban heating and cooling networks (5GDHC) in European cities.

The project will last over 3 years (2018-2022). Mijwater Ltd. based in the Netherlands is lead partner. The project comprises 12 partners and 7 secondary partners. Five pilot sites located in Paris-Saclay (France), Bochum (Germany), Brunssum (Netherlands), Glasgow and Nottingham (United Kingdom) will develop 5GDHC networks. [More info](#)

Want to keep updated about the D2Grids project?

[Join the community on Construction21!](#)