

# **Newsletter #11**

# October 2022



# **EDITORIAL**

Just before winter, worries about heating in EU are all the more developed that natural gas and electricity prices are increasing because of geopolitical, climate and social crises currently going on.

5th generation for heating and cooling grids (5GDHC), which promotes energy efficiency and mostly rely on heat recovery and local, renewable energy sources is of course part of the solution. D2Grids project, which is now particularly working on synergies between local renewable electricity and innovative DHC grids provides you examples of what can be done.

On the agenda of this newsletter:

- Save the date! A webinar to discover how to integrate sustainable electricity in 5GDHC grids on November 2nd
- Read the article introducing this new focus for D2Grids project: synergies between sustainable electricity and 5GDHC grids!
- Know more about these synergies with a unique and tangible example: collective self-consumption photovoltaics to supply the Paris-Saclay heating and cooling grid!
- Get more info about Clyde Gateway which is involved in a national project to support geothermal energy through Scotland
- Watch the Paris-Saclay video about its 5GDHC grid!
- Understand better 5GDHC with a training course!
- Discover the 5GDHC grid in Genk inaugurated in September!
- Learn more about the new Energy Bill in the UK, which can be an opportunity for 5GDHC
- Find out how the potential and future role of near-surface geothermal energy has been determined in Germany!

Enjoy your readings,

D2Grids Project Team

# **D2GRIDS NEWS**

# Renewable electricity in 5GDHC

Decarbonising european cities



# TOP NEWS: A webinar to discover how to integrate sustainable electricity in 5GDHC grids!

#### **D2Grids Project Team**

In this webinar, you will explore the technical, legal, economic, and organizational relevance of integrating local renewable electricity and heat production with local heating, cooling and electricity needs (of buildings, urban structures or even charging stations for electric vehicles).

In addition, you will be able to benefit from the **experience of the pioneers** and in particular from the pilot sites of Paris, Brunssum and Glasgow which are developing **self-consumption** of electricity from solar panels.

Join us!



# Renewable electricity into 5GDHC

## GreenFlex

What is the **future and potential for district heating grids in Europe**? Mathilde Henry, Energy project manager at Greenflex, answered the question.

D2Grids project decided to innovate by **diversifying sources of supply of renewable electricity to 5GDHC**. Learn more about it and the reasons why it was decided to work on this topic.

Read more



Collective self-consumption photovoltaics to supply the Paris-Saclay heating and cooling grid

#### **EPA Paris-Saclay and Seqens**

A new source of renewable energy to supply 5GDHC grid in Paris-Saclay!

In this interview, Mawya Rahal and Lucas Lazzarini present the unique collaboration between the social housing company Seqens and the heating and cooling grid of the EPA Paris-Saclay. This operation consists in **producing photovoltaic electricity in collective self-consumption to supply renewable energy to the grid.** 

Read more



Clyde Gateway involved in a national project led by Durham University to support geothermal energy!

## Clyde Gateway

Clyde Gateway, D2Grids project partner, is supporting the **GEMS project**.

The project which will use the UKGEOS Glasgow observatory next to the Clyde Gateway 5GDHC grid, has been chosen to be a laboratory and inspirational example to **develop geothermal energy through Scotland**.

Read more

# **5GDHC EXPLAINED**



## [Video] Paris-Saclay pilot site: How does the 5GDHC grid work?

# **EPA Paris-Saclay**

Since 2019, the Paris-Saclay District heating and cooling grid supplies the Paris-Saclay urban campus efficiently thanks to **thermal flexibility!** The energy sources are mostly local and renewable, like **geothermal energy and heat recovery**.

Watch the video!



#### 5GDHC course is already here!

#### **Open University**

Do you want to learn more about 5GDHC? Open University, partner of the D2Grids project, offers you a **complete course** on how these grids work, the opportunities they represent, and key indicators to assess a system for district heating and cooling! **The first module is already online** and open for registration.

Read more



#### The 5th generation district heating and cooling grid inaugurated in Genk!

#### **EnergyVille and VITO**

Since the beginning of September, two new infrastructure projects of the EnergyVille research collaboration have officially been inaugurated: **CollecThor and THOREAQ**. Both projects are part of the Open Thor Living Lab and form an **important steppingstone for innovative research** into 5GDHC technologies and new construction techniques.

Read more

# DISTRICIT HEATING AND COOLING IN EUROPE



## Legislative proposal in UK: an opportunity for 5GDHC?

#### Nordic Energy & PCC

The United Kingdom is introducing an **Energy Security Bill**, setting up potential development areas for heating networks within the territory. The aim is to supply these areas with heat and cold in a **cost-effective and carbon-free way**: innovative heating networks and especially 5GDHC will be able to take advantage of this opportunity! The D2Grids pilot site in Plymouth is setting an example for future developments.

Read more



The Roadmap Near-Surface Geothermal Energy for Germany has been published!

#### **FUW GmbH**

Learn how **geothermal near-surface energy** can be exploited in Germany! Thanks to a local study in North Rhine-Westphalia, a precise methodology was implemented to assess this potential for the entire country, which led to a **national roadmap**!

Read more

# **AGENDA**



[Tuesday 29 November 2022]

Frankfurt Enlit, Frankfurt, Germany

[Monday 5 & Tuesday 6 December 2022]

Annual Energy from Waste Conference, London, England

# **MEET THE PARTNERS**



# **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.

More on D2Grids on: nweurope.eu/D2Grids

Visit the platform dedicated to 5GDHC: 5gdhc.eu

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