

NEWSLETTER | MARCH 2021



VIRTUAL STUDY TOURS

Online best-practices of renewable district heating across Europe

On-site study tours may be out of question right now, but the ENTRAIN team has come up with Plan B! We've collected virtual study tours, which show some flagship projects of renewable district heating systems and published them on our <u>website dedicated section</u>. Look at what Lund (Sweden), Berlin, Potsdam, Ludwigsburg-Kornwestheim, Mengsberg, villages Randegg (DE) and Murau (AT), Croatian village Pokupsko and the Italian city of Varese have come up with!

One more best-practice has been presented at the ENTRAIN webmeeting on April 7th by Christian Holter, Managing Director of SolarWärme MZ GmbH that owns the second biggest solar thermal plant of Austria, which feeds the produced heat into the district heating system of Mürzzuschlag, a small town in Styria with about 9.000 inhabitants. The 5.000 m2 solar thermal plant (little less than a football field) produces 10% of the heat that is distributed, and during the summer months it is supposed to produce enough heat to switch off the other plants of the net!

NEWS FROM OUR TARGET REGIONS



Friuli Venezia Giulia

FIRST QM PROCEDURE IN FVG AND ITALY

We have received the first formal request from a municipality in FVG pilot region - Gemona del Friuli - for certification according to the QM protocol of the biomass DH plant soon to be built. In the last months APE has offered free consultancy to municipalities interested in applying for regional grants for installation /upgrade of biomass DH networks, in order to help them certifing the plants with QM standards.

Kontinentalna Hrvatska

WORKING ON GEOTHERMAL PROJECT IN KARLOVAC AND QM IMPLEMENTATION

REGEA is helping the city of Karlovac exploring the possibilities to utilize geothermal energy for their DH network now powered by gas. The city aims to lower prices for consumers as well as CO2 emissions. Meetings with local decision makers are in progress for discussing the implementation of QM Holzheizwerke on a step-by-step basis.



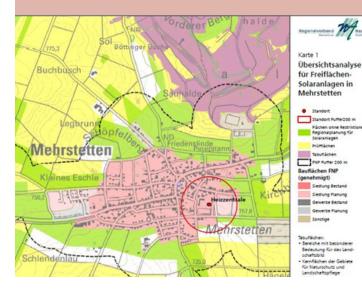
Vzhodna Slovenija pilot project in ptuj

The reconstruction of the DH system in the city of Ptuj - the biggest city in the Slovenian target region Lower Podravje - got the green light last month from the Municipal council and now the project goes forward to the realization process. The main goals are replacing natural gas with wood biomass, reducing the peak load of a boiler room and connecting new consumers to the grid. In the image: conceptual design of the project.

Mazowieckie Płońsk energy cluster

The Płońsk Energy Cluster, established since November 2017, aims at the improvement of energy security and the use of RES. Members of the Cluster have been already producing energy from biomass in the combined heat and power (CHP) power plant and they are producing biogas. The Płońsk Cluster wants to become independent in production of renewable energy for the needs of its members.

Neckar - Alb





Neckar-Alb activities in spatial and heat planning

Our German team is supporting local communities in spatial planning by creating GISbased maps in Neckar-Alb's target region. 7 pilot projects have already been identified and another one - Breitenholz - might join them! They have started an information campaign to more oilbased communities proposing options for solarthermal and PV. The Neckar-Alb regional development plan has been revised by partner RVNA to improve the use of RES.

TWIN PROJECTS AND INITIATIVES

Section dedicated to news coming from other projects & initiatives focusing on the topic of district heating and cooling powered by renewables.

O RES O O DHC

RES-DHC gains momentum

The project RES-DHC (Renewable **Energy Sources in District Heating** and Cooling) recently launched its website, as well as social media accounts on Twitter and LinkedIn. Furthermore, subscription to the newsletter is now open: It will provide further information and news about RES DHC (also including the former Solar District Heating newsletter). Baseline surveys about the projects' target regions and on a European level were released in February. In the following weeks, regional stakeholder advisory groups (RSAGs) will be established. The project aims at transforming existing urban district heating and cooling networks towards higher shares of renewable energy.



A new demonstrator has joined the project

The demo site, consisting of a newly built low-temperature network, is located in Szczecin, Poland and operated by Szczecińska Energetyka Cieplna. The grid consists of a 2-pipe system with warm and cold pipe that distributes thermal energy flows between neighboring buildings. The modern island system is independent from the existing DH network and will exploit local waste heat, heat pumps, cooling machines and renewable energy sources, enabling flexible use of heat and cold, and prosumer integration. Smart control will be implemented for operational optimization and data mining. Further info available here.



Renewable synergy in Romania

The University POLITEHNICA of Bucharest (Romania), one of the four demo sites of the WEDISTRICT project, is about to test the integration of renewable energy in its DH network, currently supplied a gas CHP unit. The new system will also include a unit producing thermal energy from geothermal heat pumps combined with hybrid photovoltaic/thermal collectors. Furthermore, the borehole heat exchanger of the heat pumps could be used for passive cooling of the building during the summer while the active cooling of the heat pumps can supplement the cooling demand.

The Celsius Initiative: a European project that lives on



Having grown from a 7th Framework Programme project into an initiative, <u>Celsius</u> is a collaboration hub for actors working with cities in their energy transition through the deployment of smart and sustainable heating&cooling solutions. This is done through continuous knowledge sharing via the <u>Celsius Toolbox</u>, monthly <u>newsletters</u> and <u>webinars</u>; supporting replication of innovative solutions, policy work with European Institutions and hands on support for cities through the <u>Celsius forerunner groups (CFG)</u>, built on a demand-based peer-to-peer approach.

Solar district heating (SDH): the information portal www.solarthermalworld.org

Four years of global SDH research summarised in online workshop and factsheets; Benefits of 4G and 5G heat networks; Three SDH plants under development in Croatia; Improved design for giga-size pit heat storage; Poland shifts away from coal-fired district heating; Construction of largest Swedish SDH plant with parabolics; Spotlight on SDH potential in Germany, the Netherlands and Austria; Quick Check BIOSOL: New tool helps utilities make the right choices.