



A ROADMAP FOR DH WHICH KEEPS THE EU'S DEAL BOTH GREEN & WARM

Ing. Martin Hájek, Ph.D.

Association for District Heating of the Czech Republic



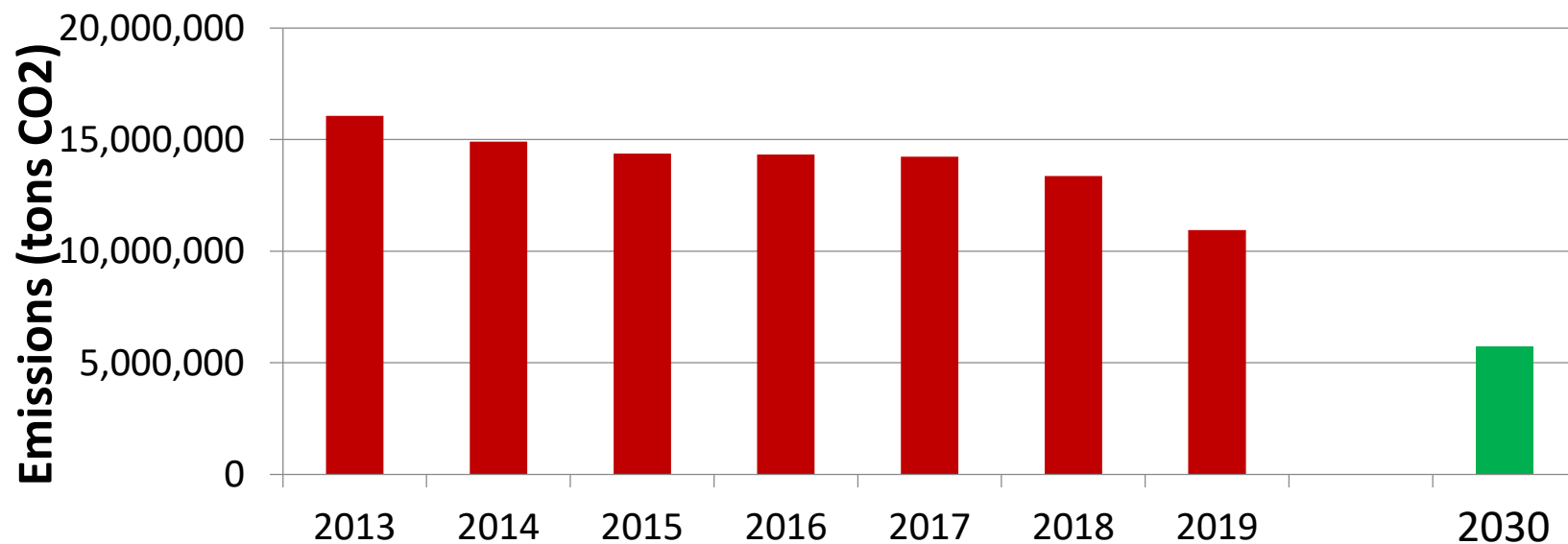
This project is funded by the EU's Horizon 2020 research and innovation programme under grant agreement N°784966, and lasts from April 2018 to September 2020.

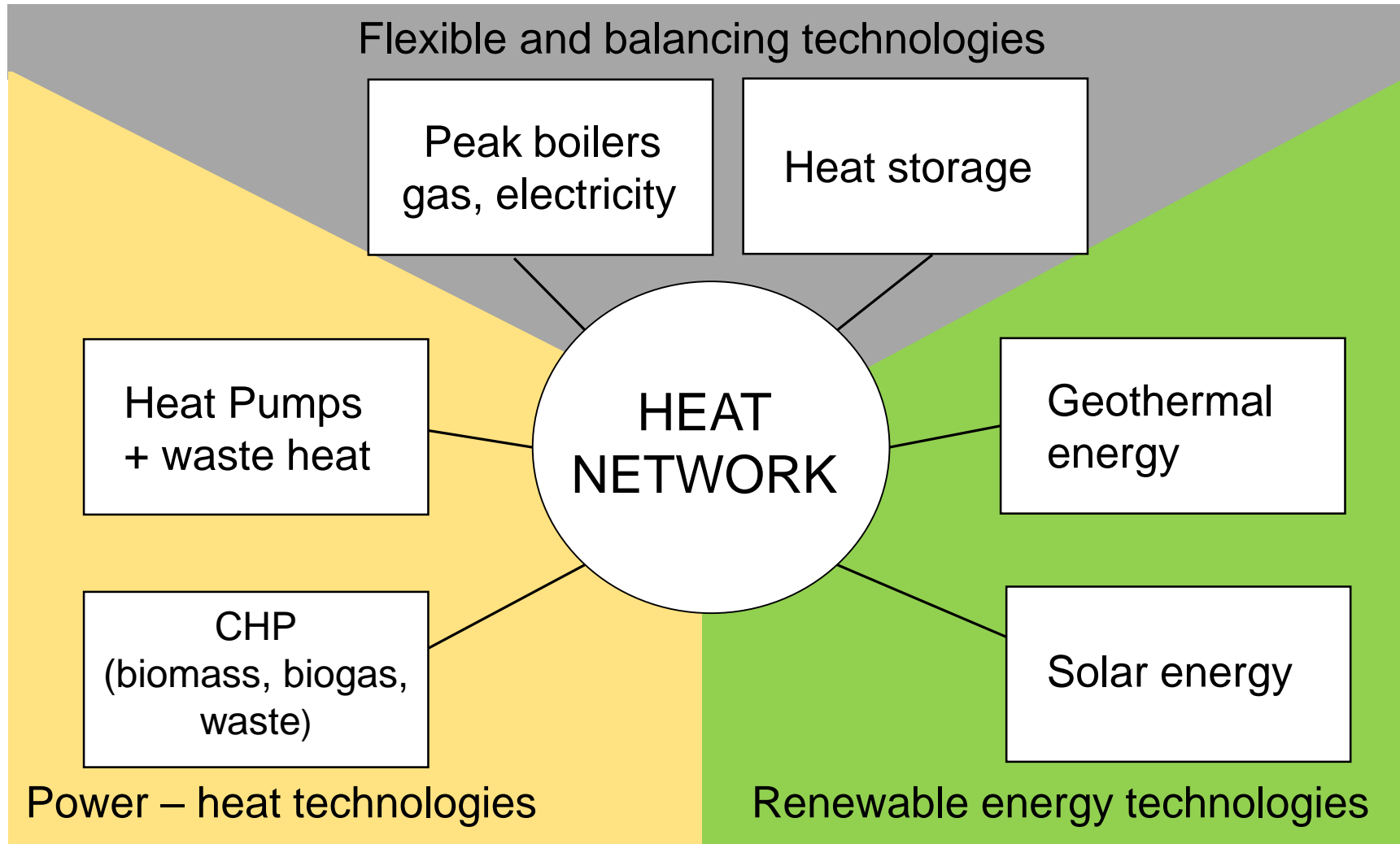
This project receives co-funding from the German Federal Ministry of Economic Cooperation and Development.



DH - FROM PART OF THE PROBLEM TO PART OF THE SOLUTION

CO2 emissions from DH plants in the Czech Republic





Lessons learned - policy level

For transformation/development of DH you need:

1. Clear vision of DH systems role in overall energy system / decarbonization effort
2. Transformation plan for DH outlining costs, benefits, solutions on national and regional level
3. Level playing field = uniform cost of carbon for DH and local heating solutions
4. Proper incentives for DH refurbishment/development
5. Open dialogue with stakeholders / public support

Legislative support and action plans for the modernisation of DH

- The legislative support for the modernization of DH is **not always clearly defined** and, especially at the local level, it is not elaborated into detailed plans
- KeepWarm partners have therefore created **action plans** in which they propose specific solutions
- **Seven national action plans for DHS retrofitting** have been developed in national contexts in consultation with the KeepWarm project partners and other interested stakeholders
- Specific targets and **measures have been identified**
- **Negotiations with national authorities** on the incorporation of these solutions into national legislation were held

Lessons learned – DH system level

- Reflect on the current and future needs of your DH system
- First prioritize energy efficiency measures (improve operation, insulate pipes, decrease heat losses etc.)
- Have clear long-term decarbonization goal and path, avoid unnecessary fuel shifts to other fossil fuel
- Acquire in-depth knowledge of sustainable resources available in your region
- Don't rely on single source of energy – look for synergies of different sources

How to retrofit DH system?

You will need to:

- understand the **current state of the DH sector** in your country, identify key challenges in the decarbonisation process
- evaluate **prerequisites** and a potential for retrofits of the DHS
- assess **legislation that provides conditions, barriers, and opportunities** for DHS modernization
- recognize the **roles of individual stakeholders** and their impact on the process
- **implement DH retrofits** contributing to European decarbonisation objectives
- identify **critical risks influencing DH modernisation processes**, as well as measures to mitigate or eliminate these risks
- take **concrete steps forward for public authorities**, policy makers, potential investors and other key stakeholders

KeepWarm solutions to overcome main obstacles of DHS modernisation

The main obstacles	KeepWarm specific solutions
Lack of the national heating strategy	Action plans with specific solutions were created
Competition and profitability of heating providers	Negotiations with state authorities on equal conditions for all heat providers
Training of staff in new technologies	Offer and organization of regular educational seminars
Decreasing in heat demand and heat load	Reaching new customers and expanding heating networks
High investment costs for RES	State aid negotiations

FINAL PIECE OF WISDOM

- Confucius: „Better a diamond with a flaw than a pebble without.”
- William Shakespeare: „Striving to better, oft we mar what's well.”
- Voltaire: “The best is the enemy of the good.”
- Robert Watson-Watt: "Give them the third best to go on with; the second best comes too late, the best never comes.”

While waiting for perfect solutions we will loose fight with climate change.
Let's be deliberately imperfect and win!

Thank you!



This project is funded by the EU's Horizon 2020 research and innovation programme under grant agreement N°784966, and lasts from April 2018 – September 2020.

This project receives co-funding from the German Federal Ministry of Economic Cooperation and Development.

