Stakeholder Survey – Urban Heating and Cooling Transition

Aksana Krasatsenka,
Euroheat & Power / DHC+

Policy workshop
17 March 2022

The Celsius Initiative

Accelerate the **energy transition** through the deployment of **smart and sustainable heating and cooling solutions** in **cities** and accelerating their **market uptake**.

Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

Celsius Stakeholder Survey – Urban Heating and Cooling Transition

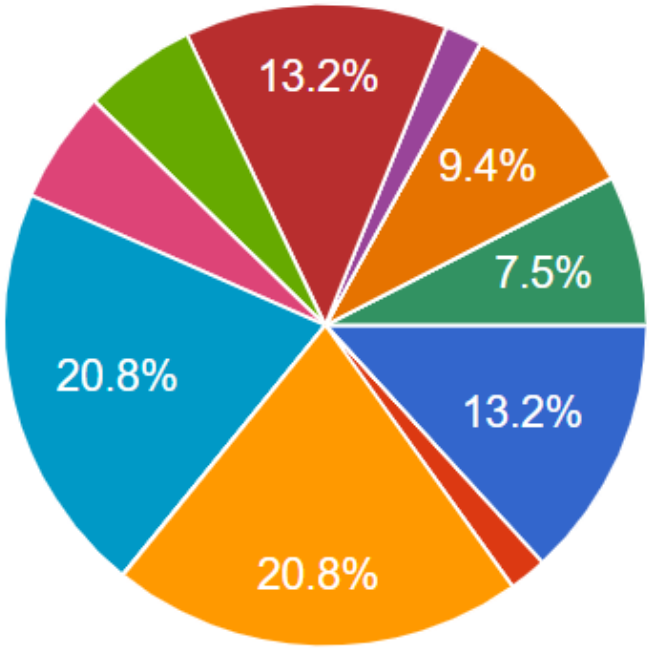
- ✓ Analyse stakeholders' **awareness and understanding** of **DHC and its role** in realising the **EU's climate and energy objectives**
- ✓ **Relevant stakeholders** include the European institutions and the wider EU policy community, representatives of civil society, industry and academia

Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

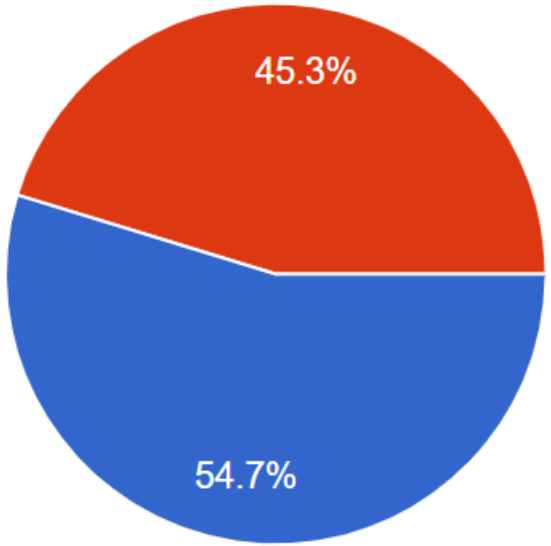
Organisation type

53 responses



- Academic - University / Institute / Res…
- Consultancy - Engineering / Design /…
- Utility / Operator
- Association / Federation
- Municipal Sector - City / County

How much do you know about district heating & cooling (DHC)?

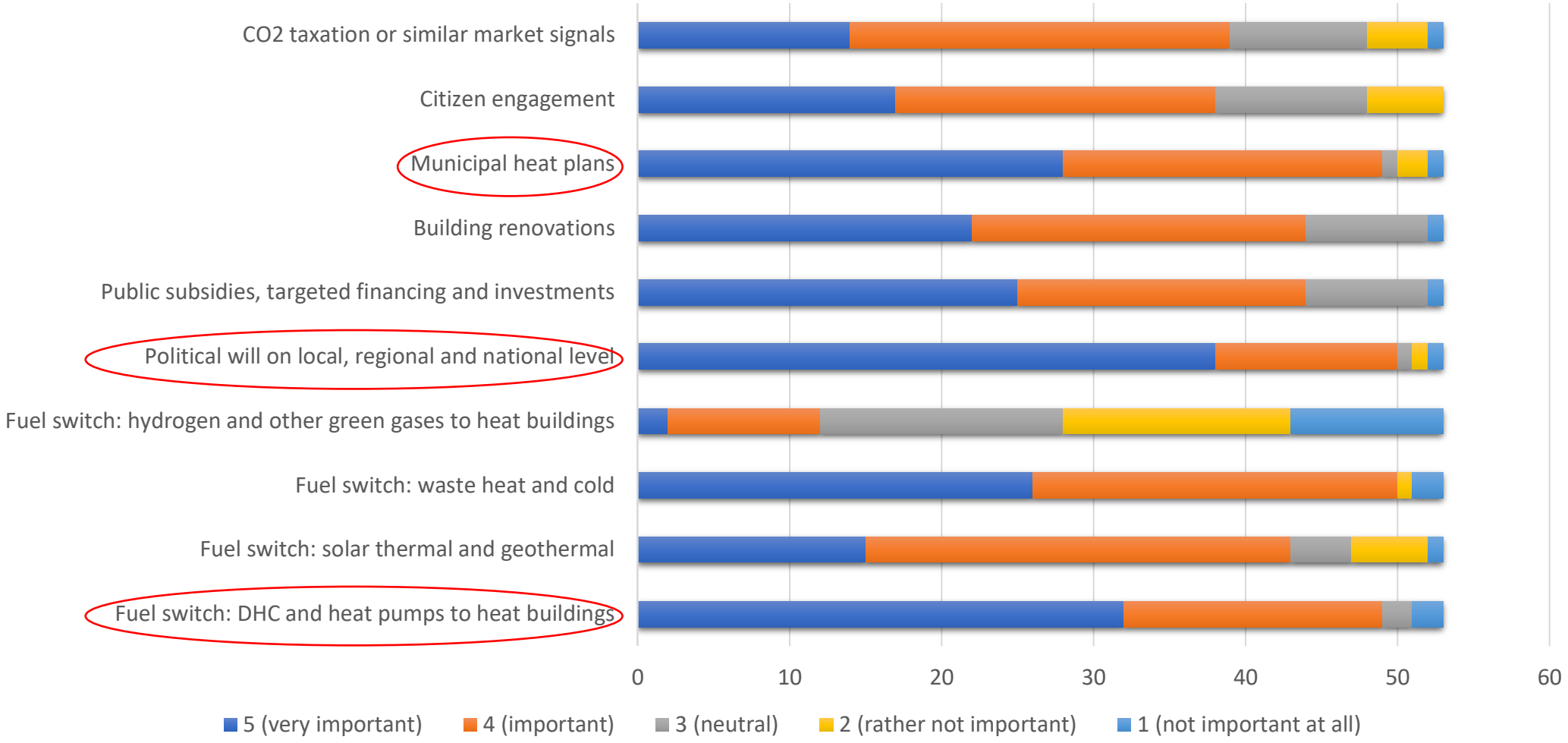


- I am an expert
- I know a bit
- I don't know anything about DHC

Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

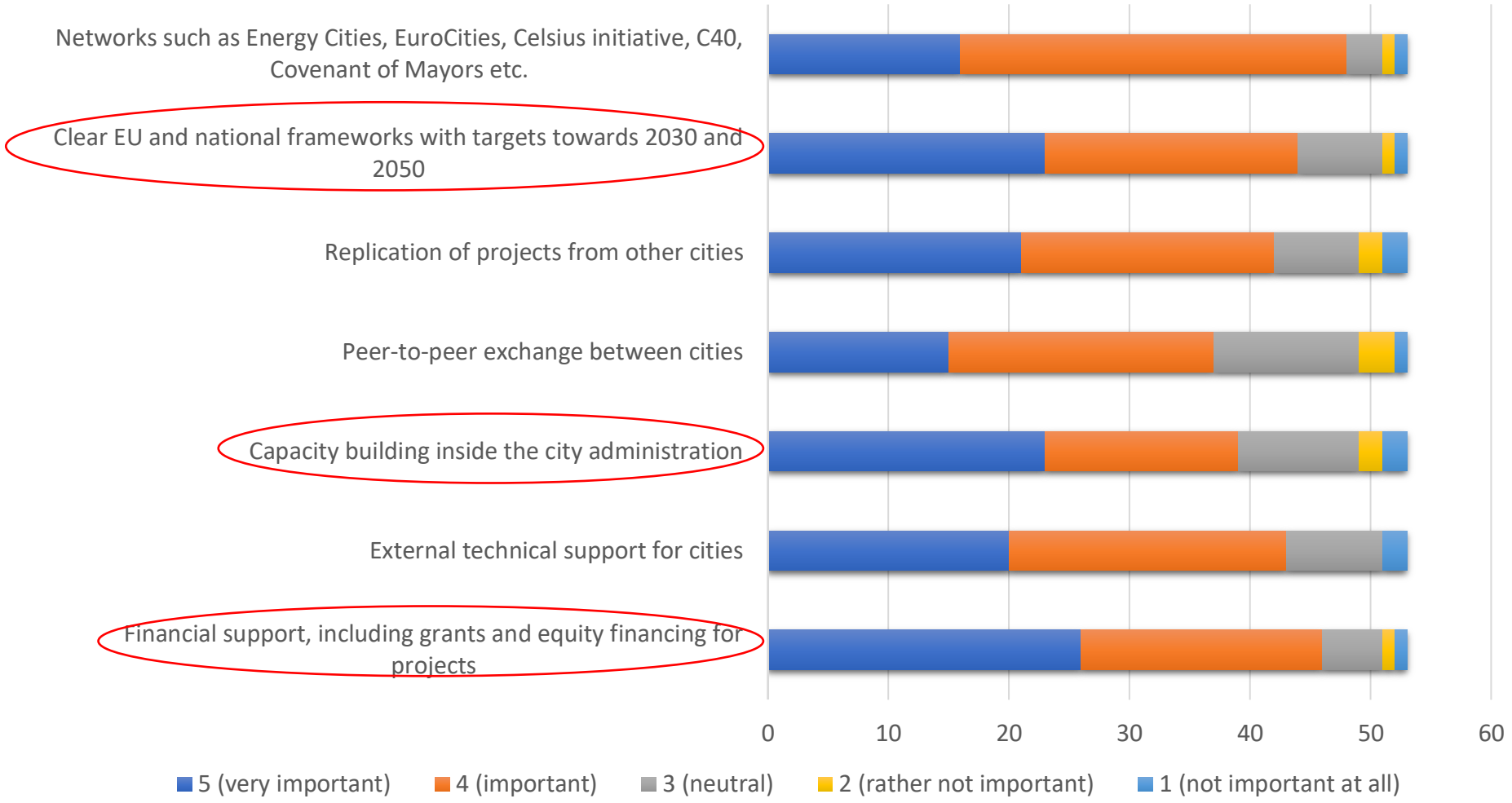
Topics Important to Achieve a Fast Heat Transition in Cities



Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

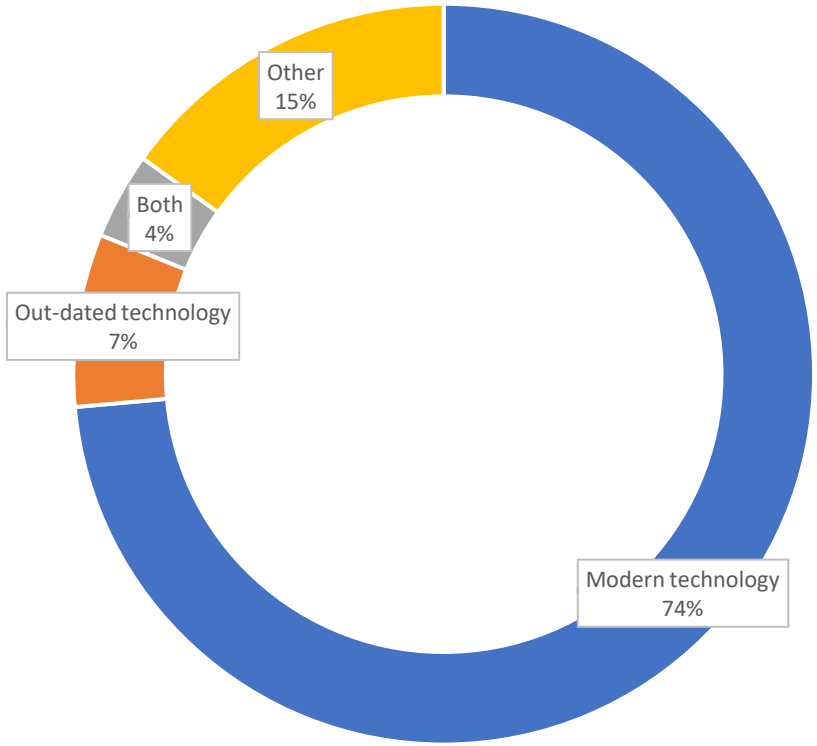
Factors to Empower Cities in their Heat Transition



Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

District Heating and Cooling Networks are…



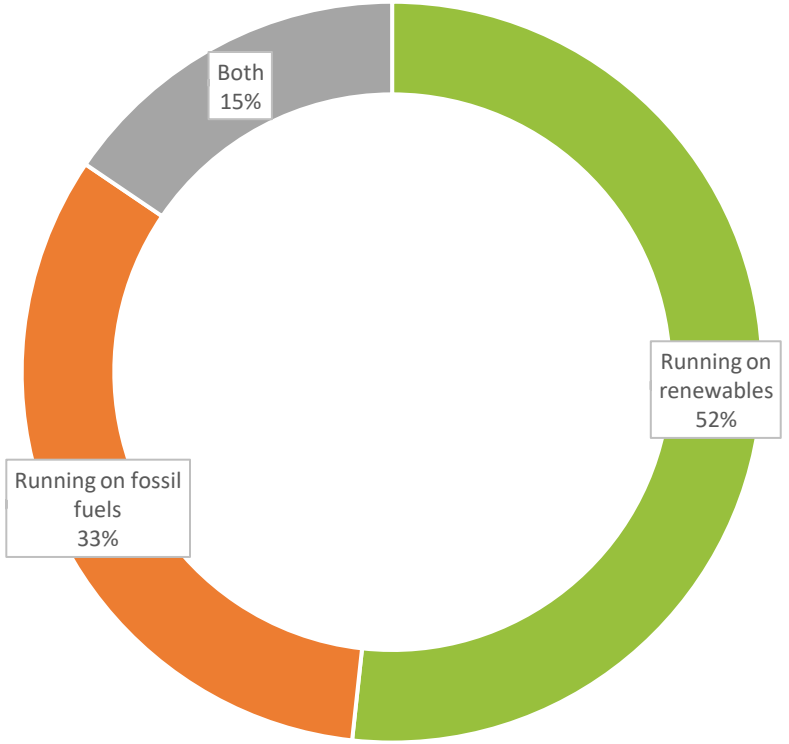
- *A well-known technology that requires modernisation*
- *an established and future-proofed technology in urban areas*
- *It's an old technology that is still improving with different generations*
- *an old and well tested method to achieve system efficiency*
- *an important technology that can be modern (4GDH) but also out-dated (1GDH)*
- *A key to a successful Energy Transition of the heating sector*
- *promising*

Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

District Heating and Cooling Networks are…

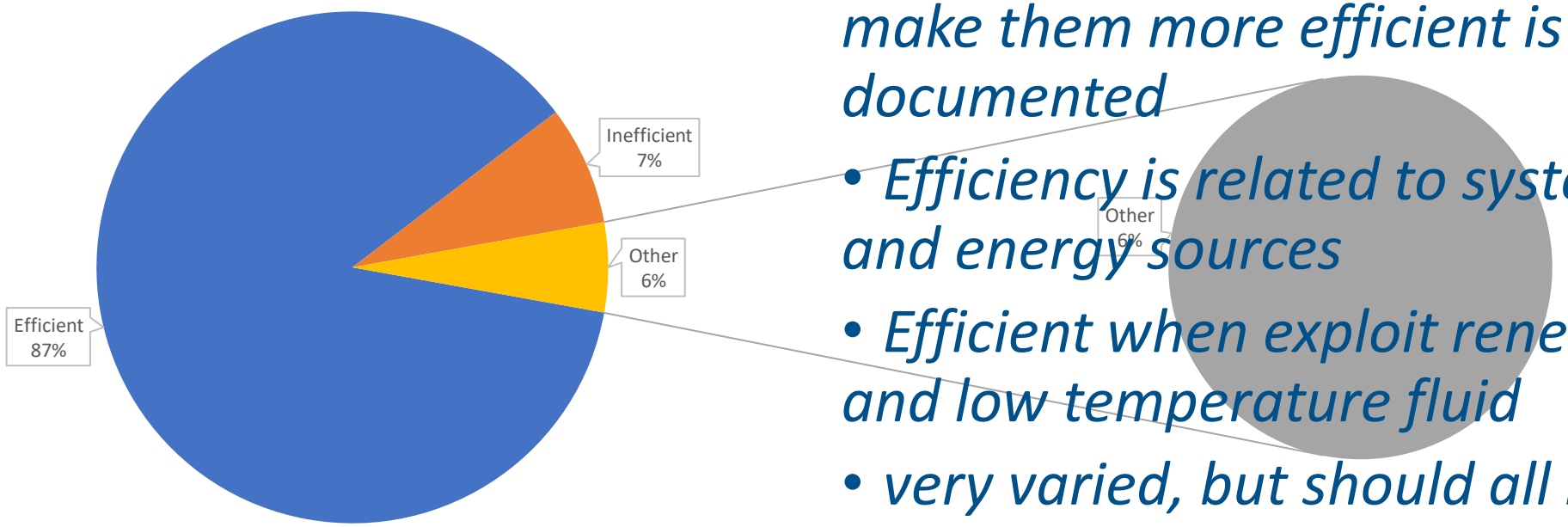
- *Depends on the local conditions*
- *should be running on renewables but they need to transition like all other energy systems*
- *must be transformed to low-temperature distribution systems with high shares of waste heat or renewable heat*
- *Currently not good enough but have a large potential for decarbonisation*



Funded by the European Union's
Horizon 2020 Programme

Swedish
Energy Agency

District Heating and Cooling Networks are…

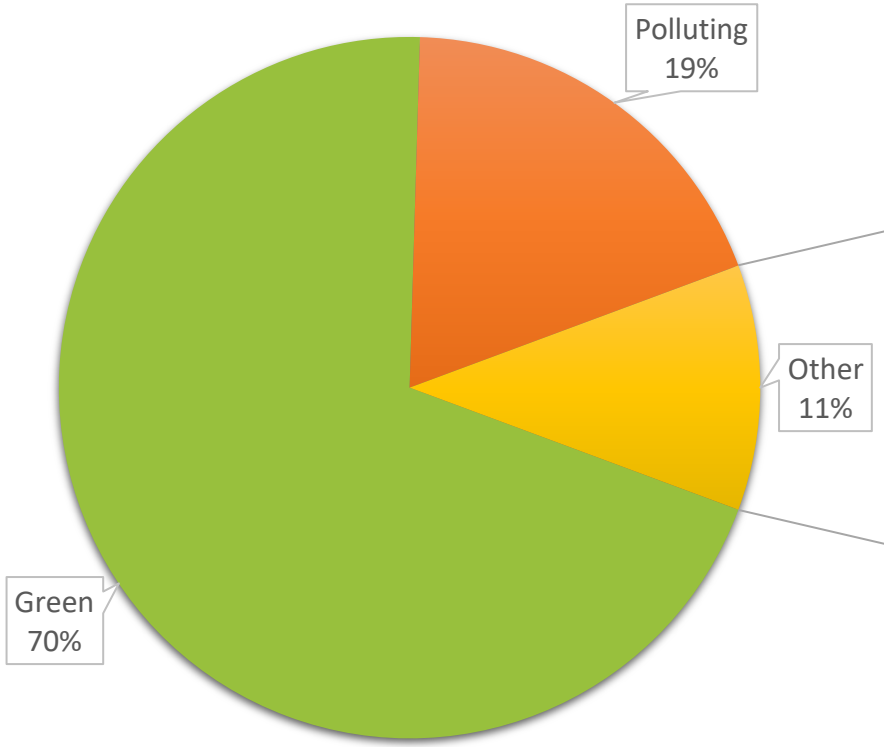


- *some are inefficient but the path to make them more efficient is well documented*
- *Efficiency is related to system age and energy sources*
- *Efficient when exploit renewables and low temperature fluid*
- *very varied, but should all be brought to high performance*

Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

District Heating and Cooling Networks are…



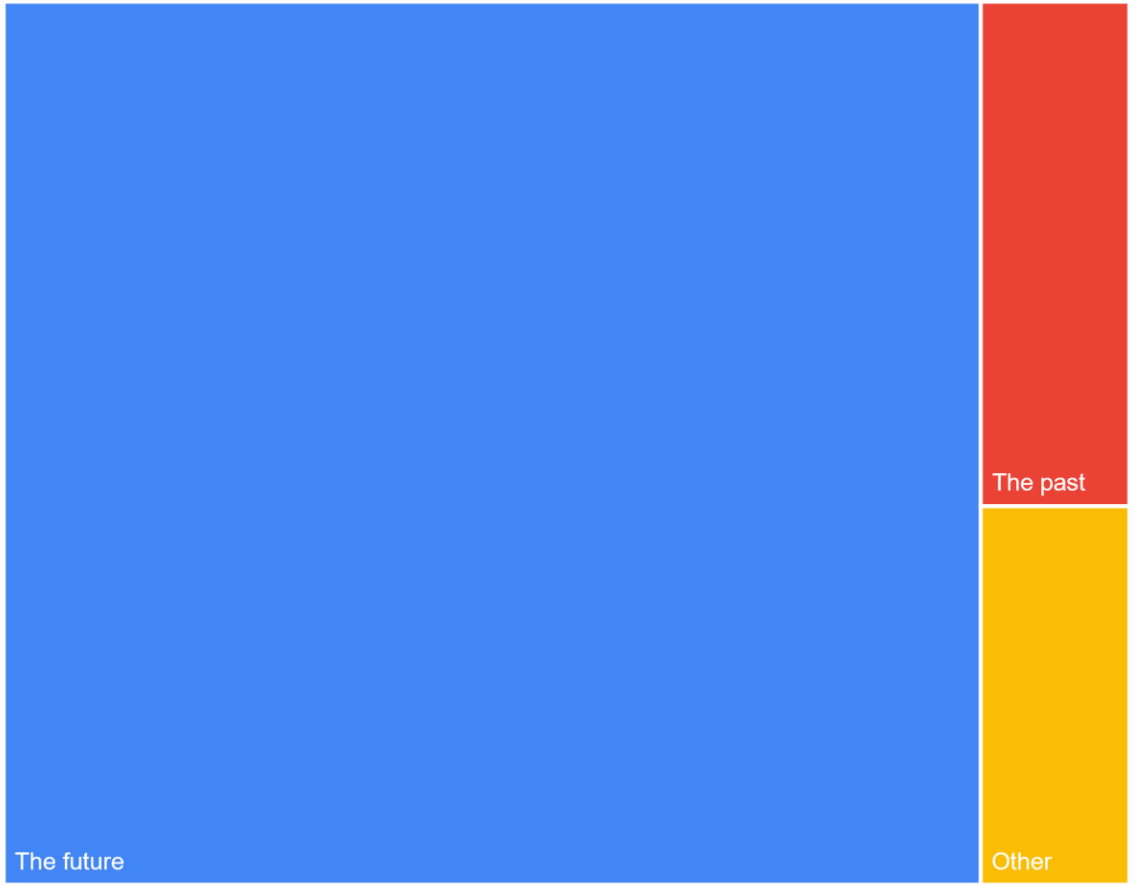
- *we need to be aware that not all are operating in a green way - coal, gas and out of date and inefficient systems*
- *This is dependent upon the energy sources and system efficiency*
- *Highly efficient with the potential to be green*
- *a key infrastructure in cities*

Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

District Heating and Cooling Networks are…

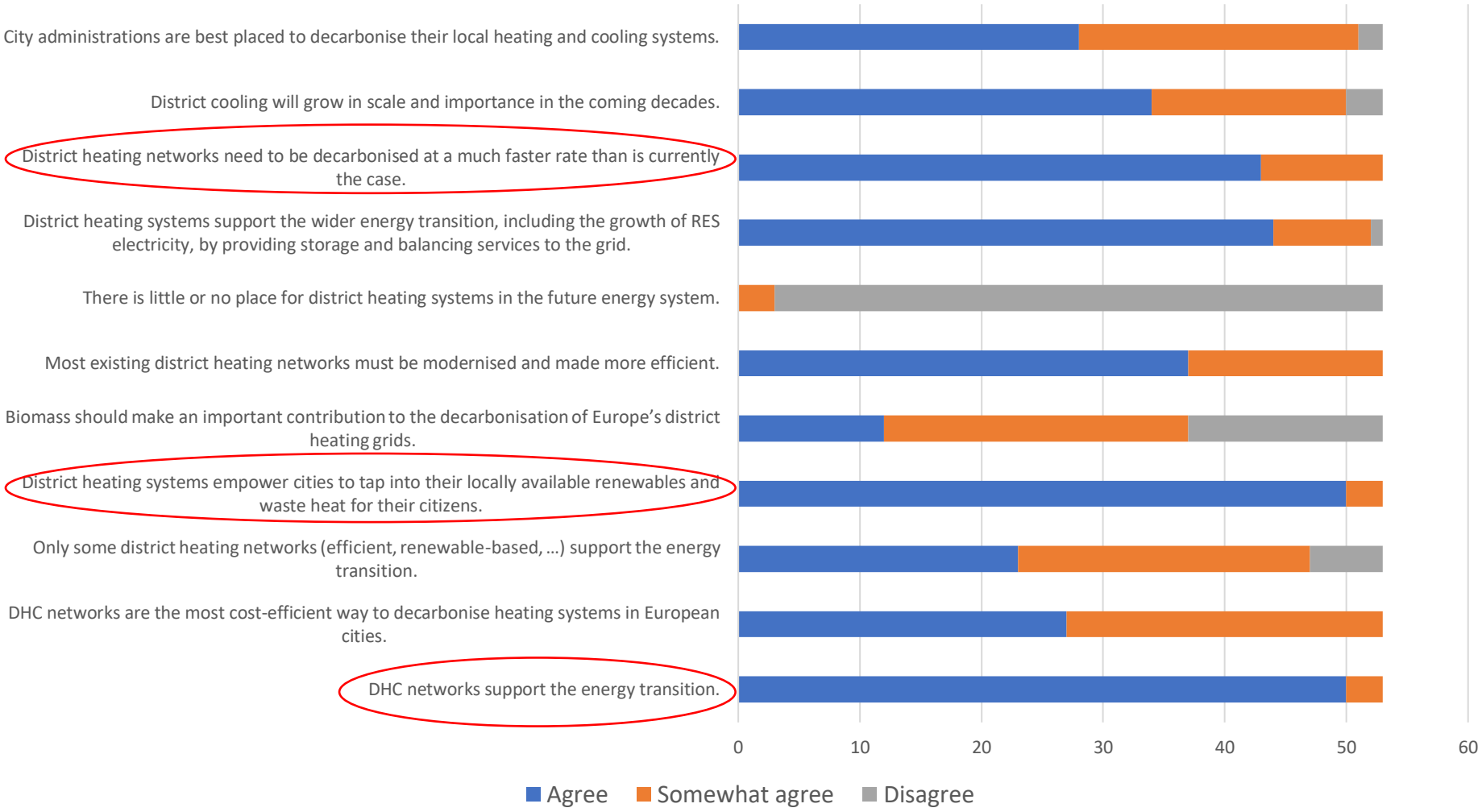
- *there will be the future only if the boundary conditions allow in some countries*
- *It's a local product that has to be situational*
- *part of an integrated fully electrified (renewable) energy system*
- *important not to forget the past (especially all the warmth DH brought, even if not done in a most efficient way)*



Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

Rate the Statements

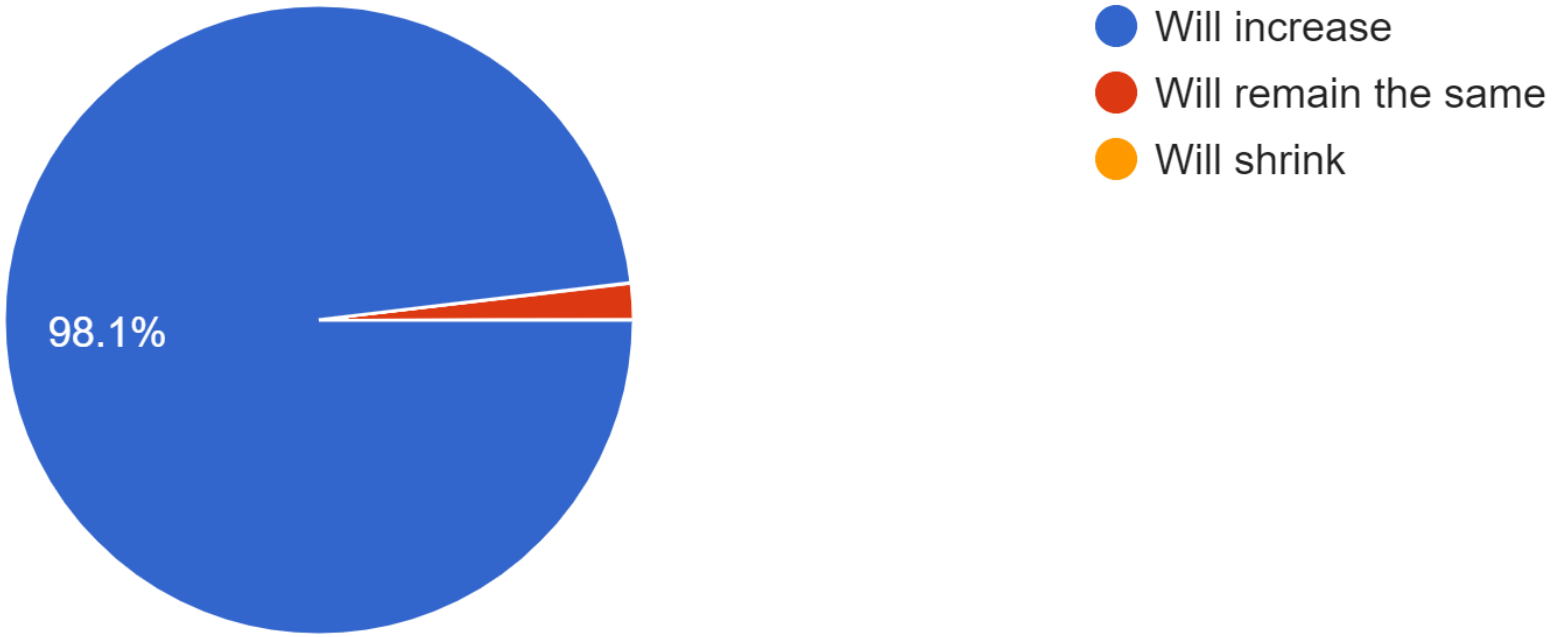


Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

Today, DH accounts for about 13% of the heating and cooling in Europe. According to you, which role will district heating and cooling networks play in the future energy system, especially in cities?

53 responses



Funded by the European Union's Horizon 2020 Programme

Swedish Energy Agency

Join us!

celsius

www.celsiuscity.eu

Celsius@johannebergsciencepark.com

@celsiuscity Celsius Initiative

Funded by the European Union's Horizon 2020 Programme