

Stakeholder Engagement

Thursday April 15 | 10:00 CET





Pauline Lucas

Policy Officer
Euroheat & Power

Moderator:

Stakeholder Engagement



Funded by the European Union's
Horizon 2020 Programme



Stakeholder Engagement

Panel of Experts



Moderator:

Pailune Lucas



Paulius Martinkus



Dmytro Romanchenko



Christian Kiem



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Horizon 2020 Programme





Paulius Martinkus

Chief Strategy & Business Development Officer
Vilniaus šilumos tinklai

Delivering the Change



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Vilniaus šilumos tinklai

DELIVERING THE CHANGE IN VILNIUS DISTRICT HEATING

VILNIUS DISTRICT HEATING COMPANY IN NUMBERS

Revenues

110,1

Mln. Eur

Total Assets

148,3

Mln. Eur

Renewable energy sources

61

%

Net Profit

7,4

Mln. Eur

ROE

6,8

%

748



Lengths of the network, km

20 687



Connected buildings, ths. sq. m

7 243



Number of connected buildings

2 672



Delivered heat, GWh

1 539



Produced heat in own plants, GWh

216 275

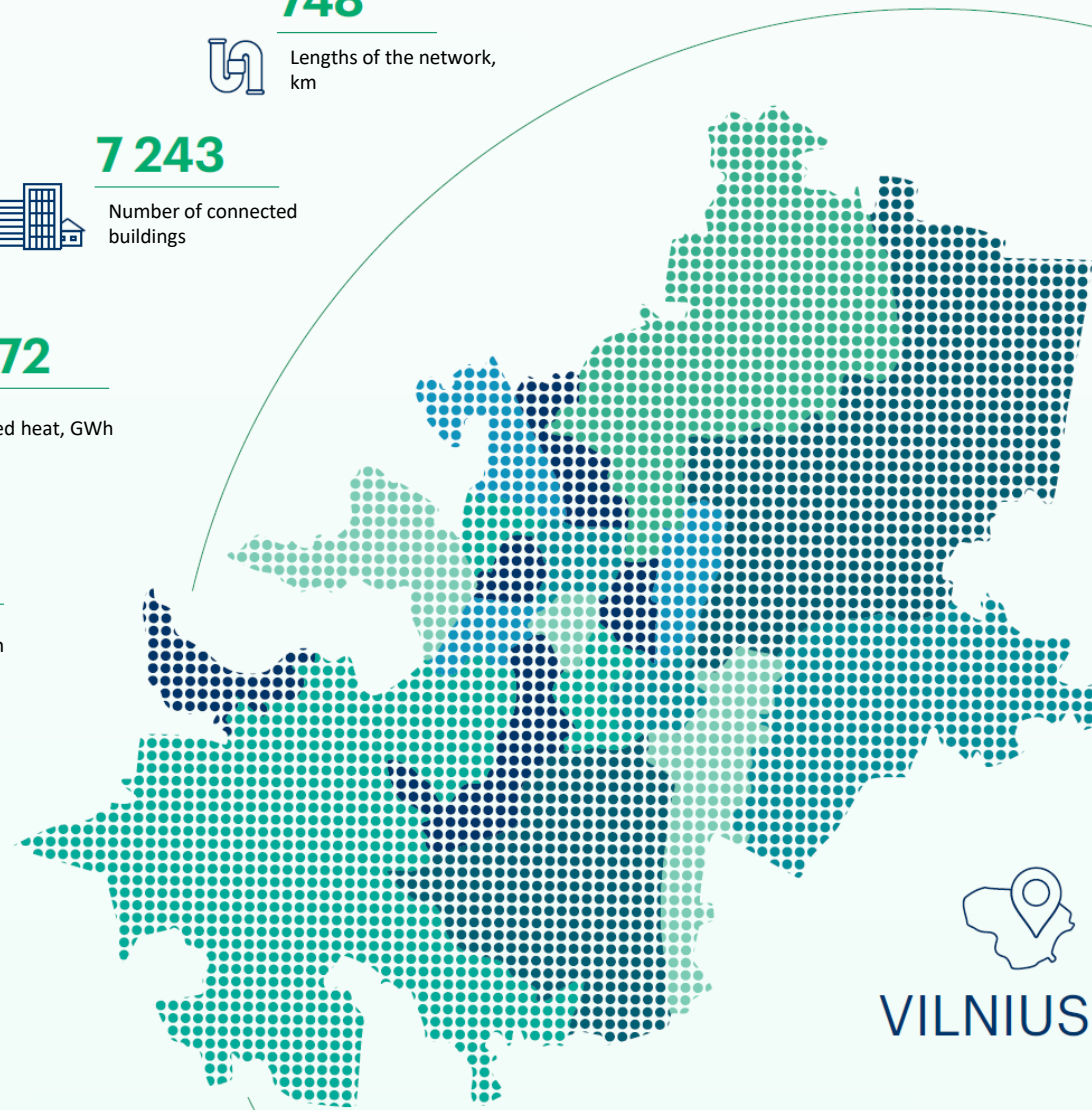


Number of households

258 340



Number of hot water meters



VILNIUS



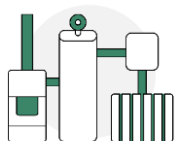
Residual heat



**Renewable energy
sources**



Smart technologies



**Low temperature
district heating networks**



District cooling

Our Priorities

to create an intelligent energy system
which is based on renewable energy
sources

LOW TEMPERATURE DISTRICT HEATING CREATES NEW OPPORTUNITIES

Decreasing network losses

Efficiency of production

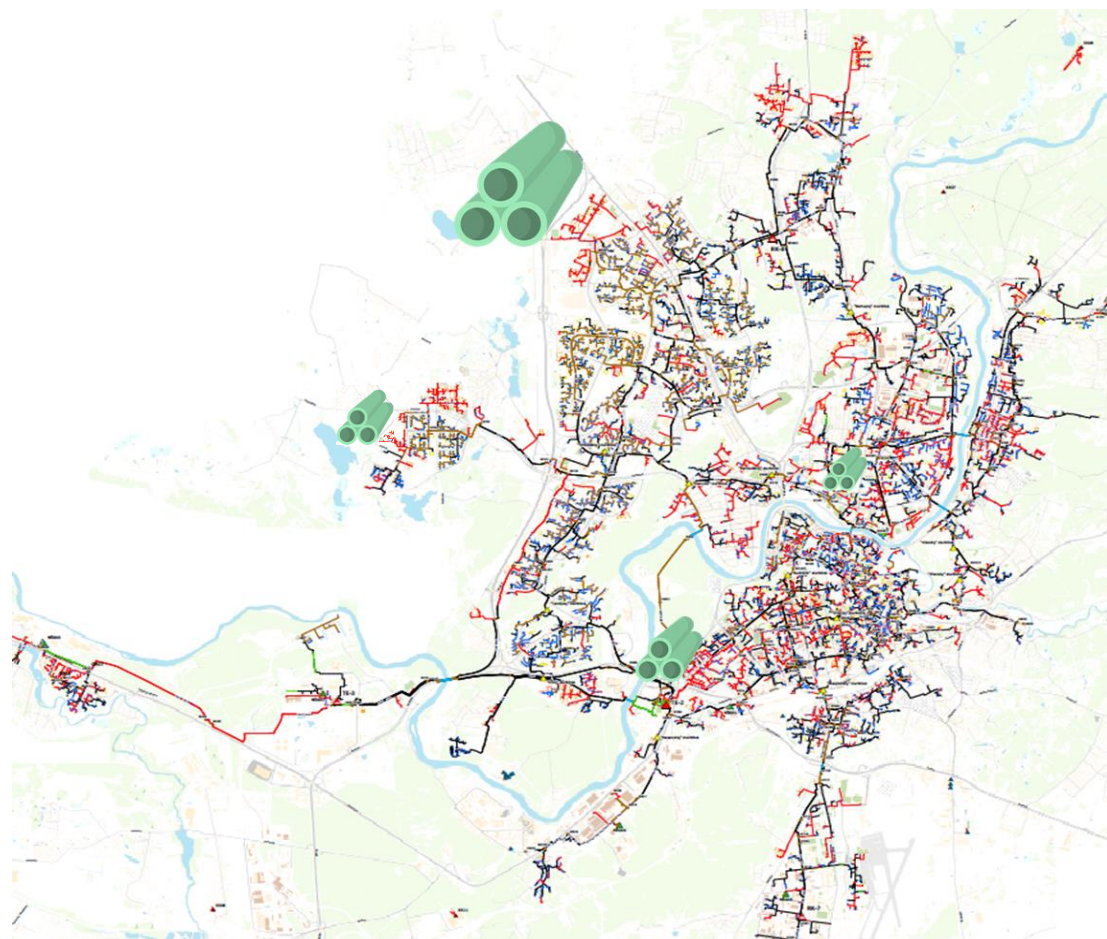
Procumers

Residual heat recuperation

Seasonal energy storage

Power-to-heat

Integration of RES



<https://iel.lt/>



intelligent energy lab



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TRIBUTE TO CELSIUS INITIATIVE

- Focused groups
- Topic setting as spearhead city
- Knowledge sharing and peer discussions
- Toolbox of the best practices

Celsius philosophy – don't re-invent the wheel!

For more information visit: <https://celsiuscity.eu/>



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Swedish
Energy Agency



Getting Started



Residual Heat



Cooling

Fossil Free



Low Temperature





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WE CARE ABOUT THE EARTH

BE BOLD

in





Dmytro Romanchenko

Expert in Energy Systems Models
Swedish Environmental Research Institute



Customers' Perspective



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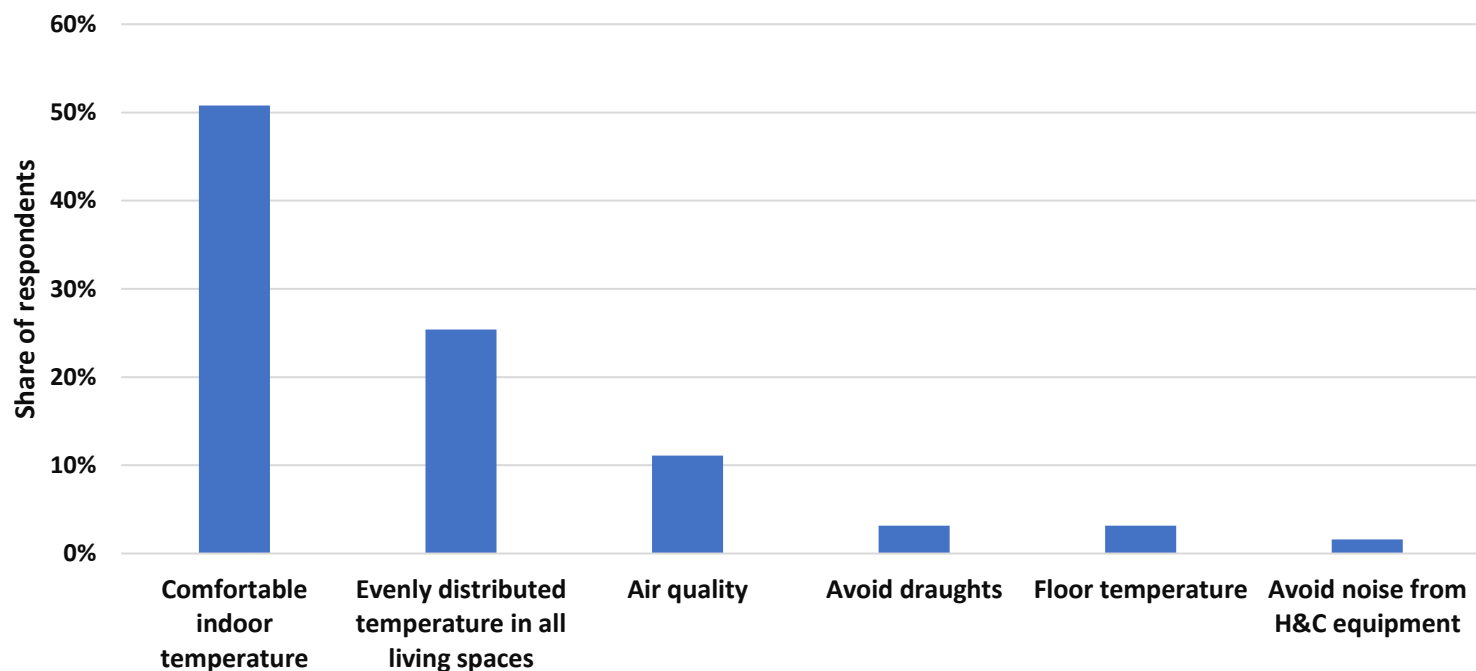
Customers' perspective on heating and cooling

Dmytro Romanchenko

IVL Swedish Environmental Research Institute

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Which indoor comfort requirements are the most important for the customers?



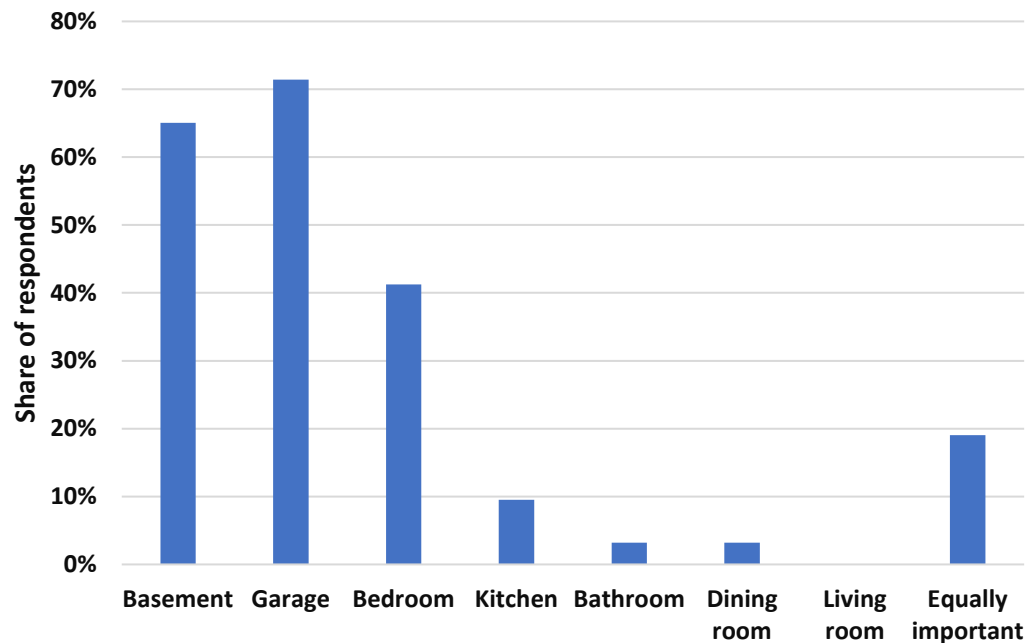
Most important indoor comfort requirements compared to each other
(based on the responses from the customers)

- Comfortable indoor temperature – the most important indoor comfort requirement (51%)
- Evenly distributed temperature is important to 25% of the respondents
- Non-temperature related comfort requirements (all together) are the most important to less than 25% of the respondents

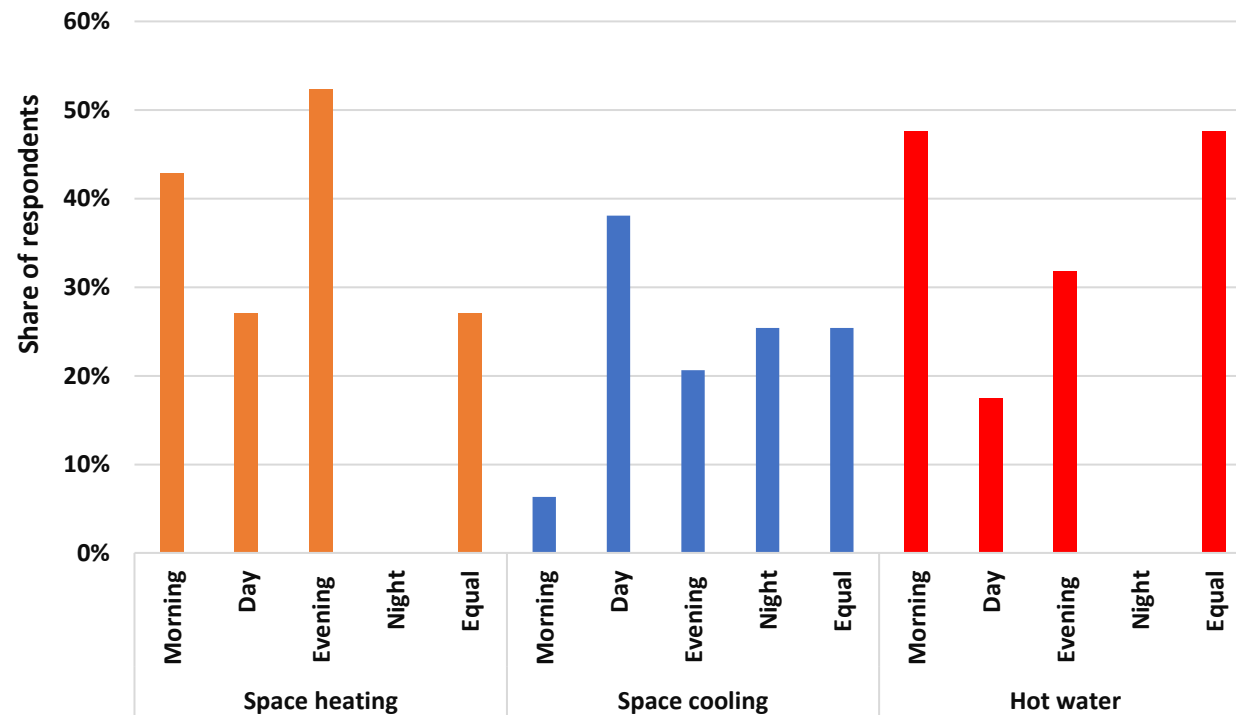
Additionally,

- Regulations on the lowest acceptable indoor temperature are generally better established than the regulations on the highest allowed temperature

Spatial and temporal flexibility of the heating and cooling demands.

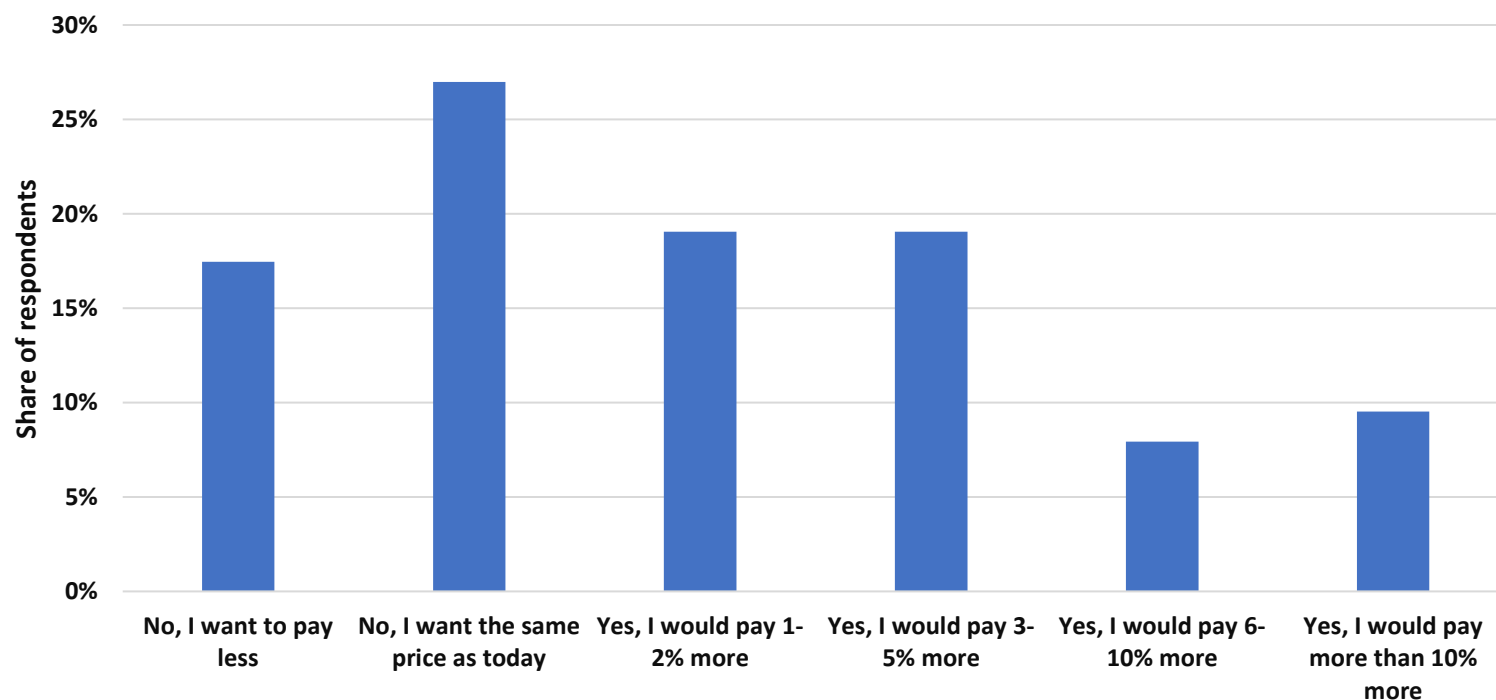


Importance of different indoor spaces to maintain comfortable indoor environment. Indoor spaces with the LOWEST importance have the highest score (share).



Importance of temporality (intraday) for space heating, space cooling, and hot water demands. Multiple answers were allowed.

How willing the customers are to pay for “greener” heating and cooling supply?



Willingness of the customers to pay for “greener” heating and cooling

- More than 50% are willing to pay for “greener” heating and cooling supply
- Around 1/5 of the respondents would not mind if the cost increased by more than 6-10%
- Almost a half of the respondents would prefer to pay the same or even lower price than they are paying today



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Thank you
www.rewardheat.eu



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Christian Kiem

Cities of the Future Project Manager
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End-User Dashboard



Funded by the European Union's
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Recovery of Urban Excess Heat

Partners working on the French demonstrator



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 768936.

@ReUseHeat





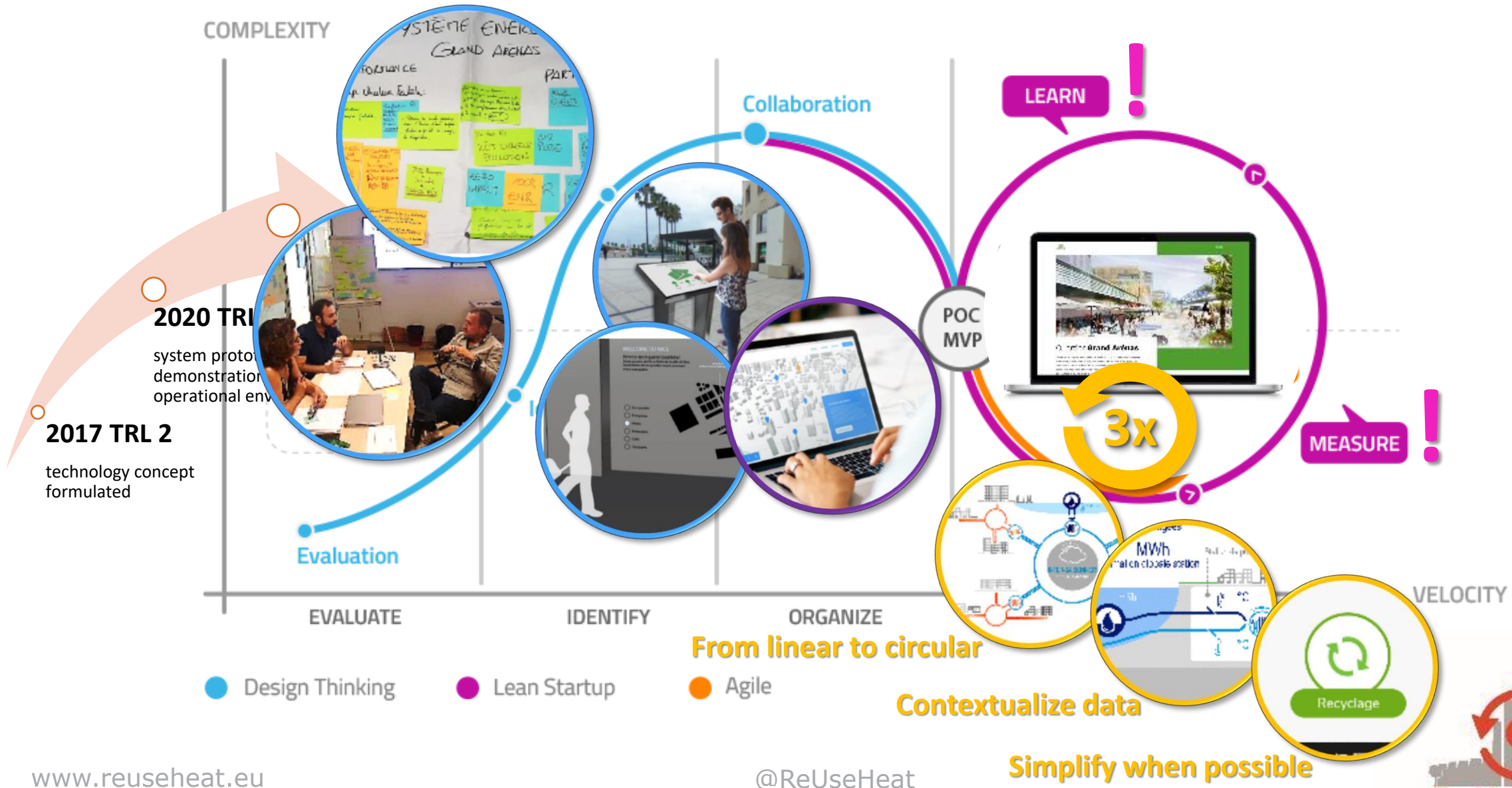
Real
time
data



Sea water based neutral temperature
heating/cooling network

Dashboard - raise acceptance and awareness of sustainable
district heating/cooling solutions among the wider public.

La Seyne-sur-Mer





DISSEMINATION !

Dashboard will be made soon publicly accessible and voice spread

VALIDATION !

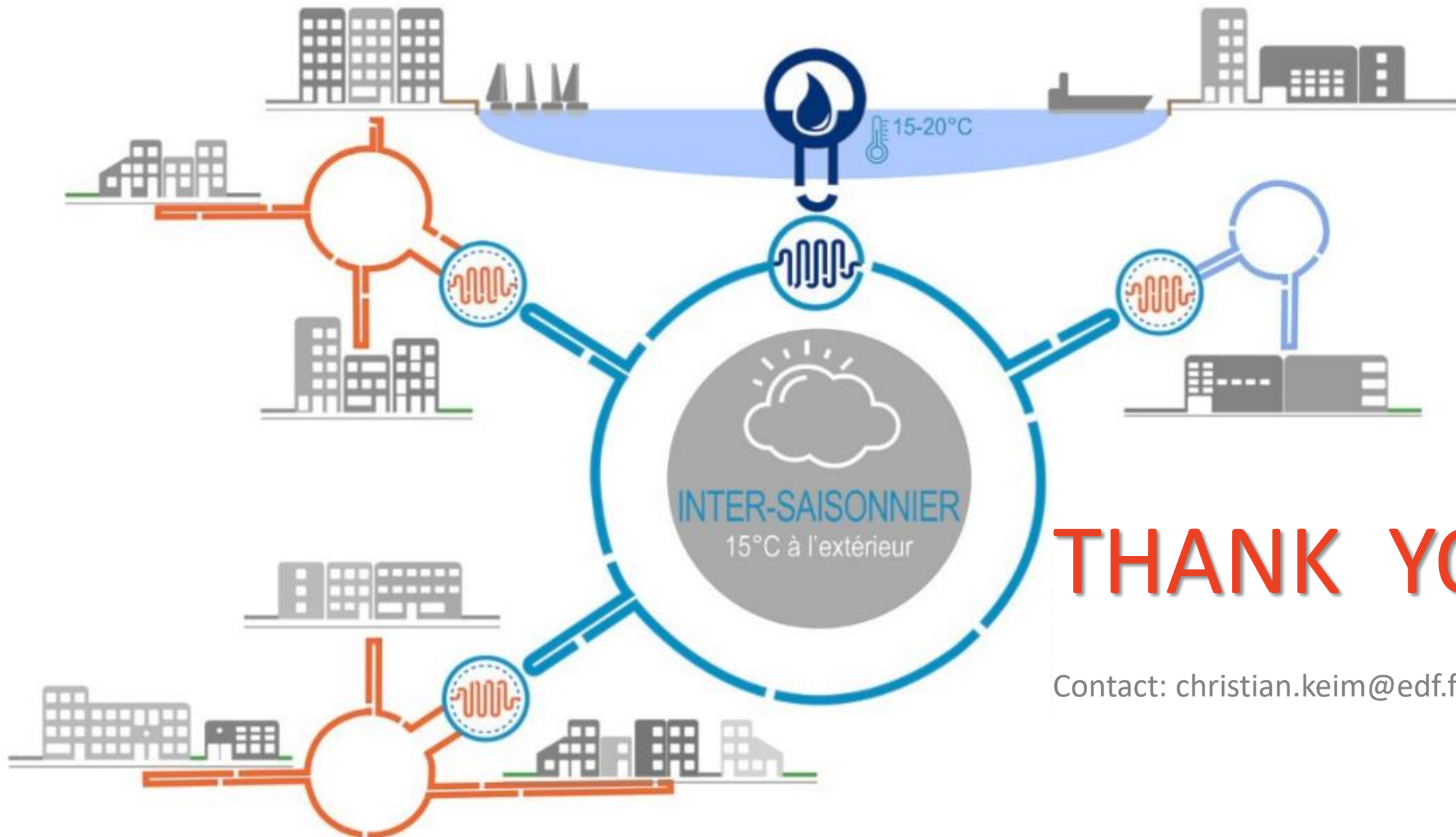
- 1) Online survey
- 2) On-site end-user feedback



REPLICATION !

How to move on to other renewable and waste-heat based networks





THANK YOU !

Contact: christian.keim@edf.fr

Stakeholder Engagement Discussion



Moderator:

Pailune Lucas



Paulius Martinkus



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Thank you!

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