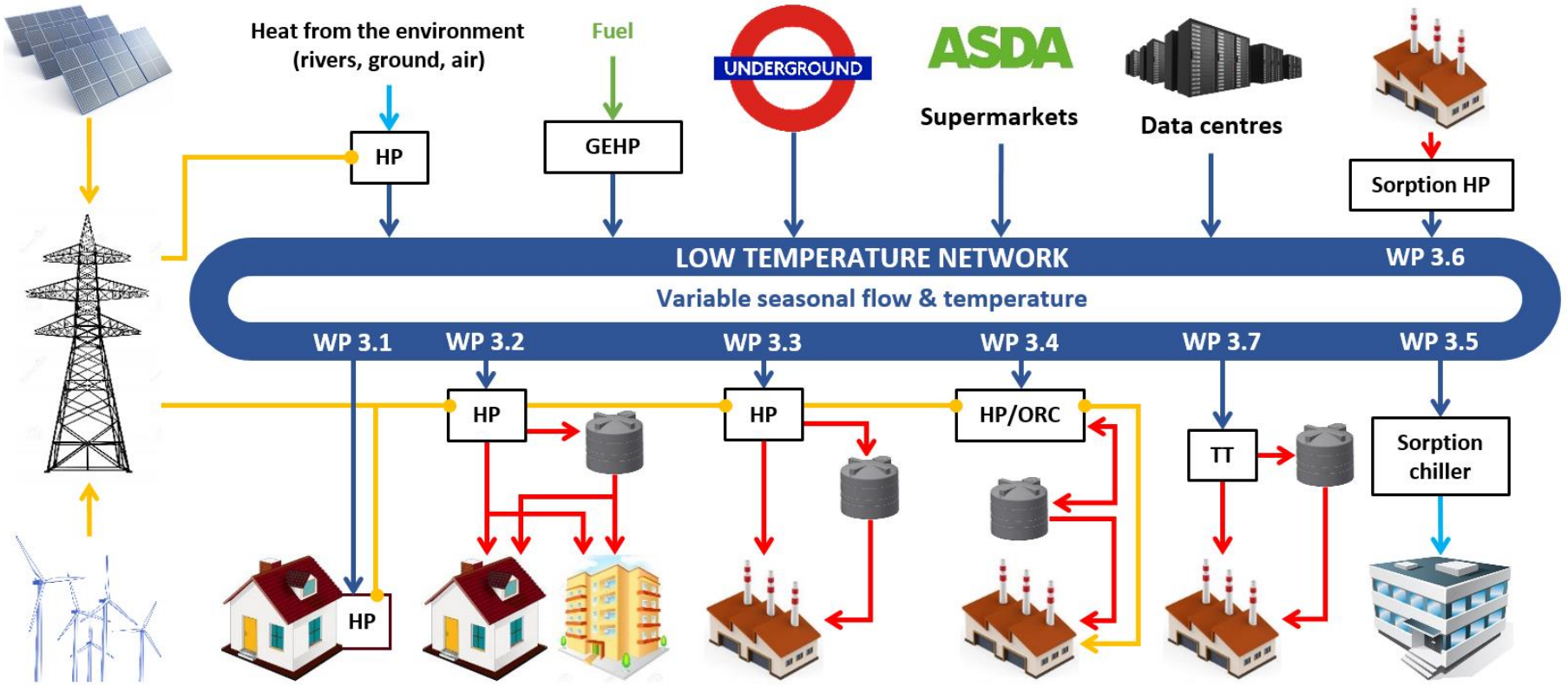

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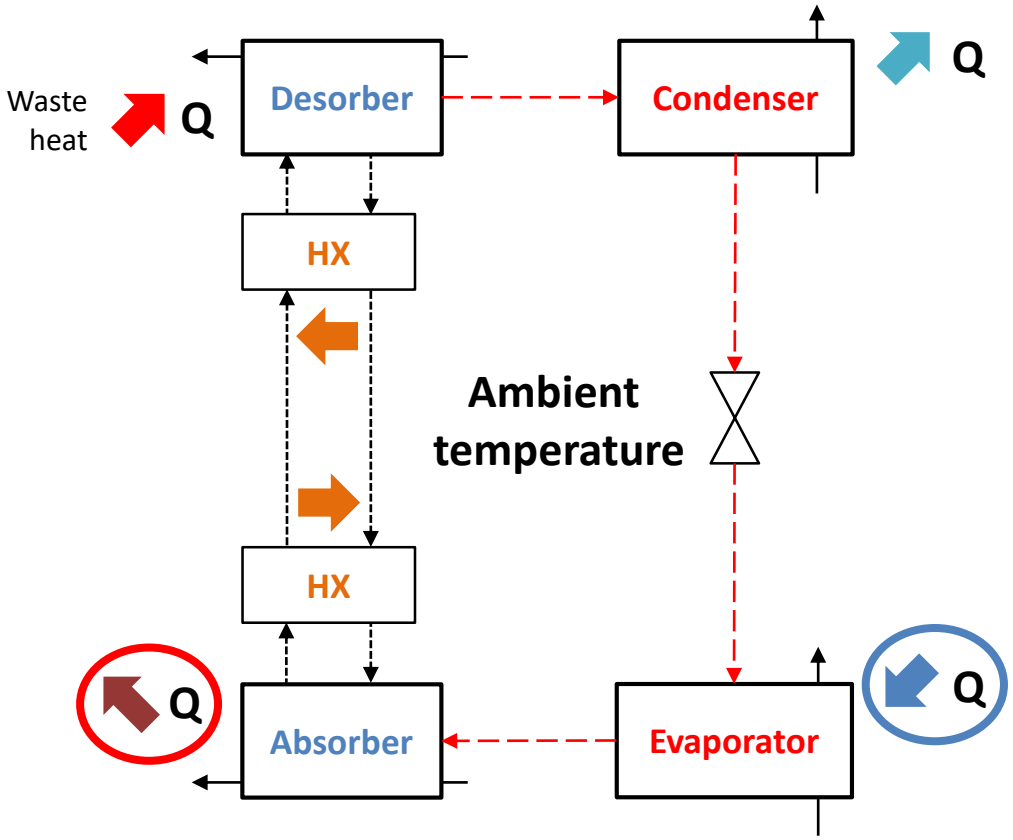
Integration of Low Temperature Networks with Heat Pumps and Thermal Storage technologies to maximise waste and ambient heat utilisation in low or zero-carbon heating and cooling solutions.

LoT-NET Webinar

Ángeles Rivero Pacho - 23rd June 2020

WP2.1 – Distribution medium, method



Thermochemical district networks:

New technology for district networks that provide heating and cooling in one **heat loss-free** network.

The innovation is the use of **thermochemical fluids** as transport medium (concentrated salt solutions).

The chemical potential is used to generate useful heat or cold from ambient heat at the place and time of demand.

Advantages:

- Less investment (no insulation, smaller pipe diameters)
- Longer distances

H_2O / LiCl | H_2O / LiI | H_2O / LiBr | CH_3OH / LiBr

Bonus project!

SMART

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- Ensure that buildings and systems are highly energy efficient → enhanced system performance reducing carbon emissions.
- Through reporting and analysis tools provide benchmarks for future capital projects.
- Improving occupants needs: comfort, health, indoor air quality and safety.

Baseline each building:

- Description of building and services, heating/cooling source, fabric, etc.
- Energy performance (kWh/m^2, CO_2 emissions)
- Controls level
- Degree of space utilisation

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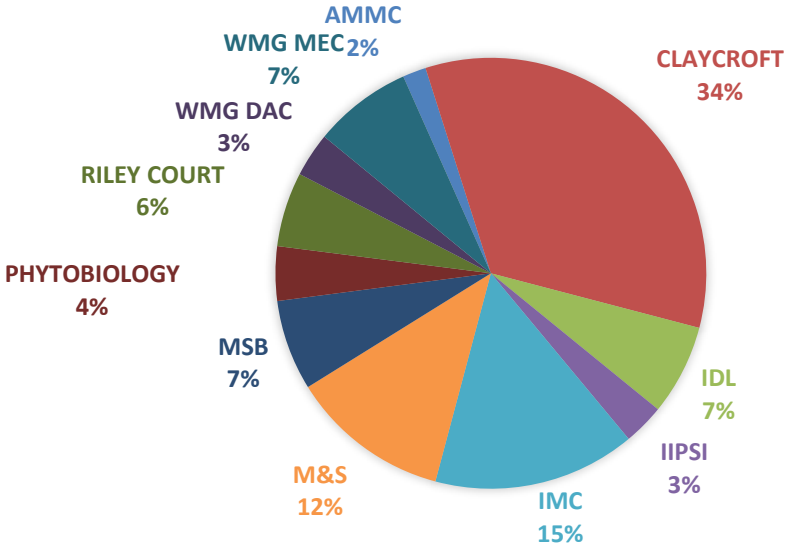

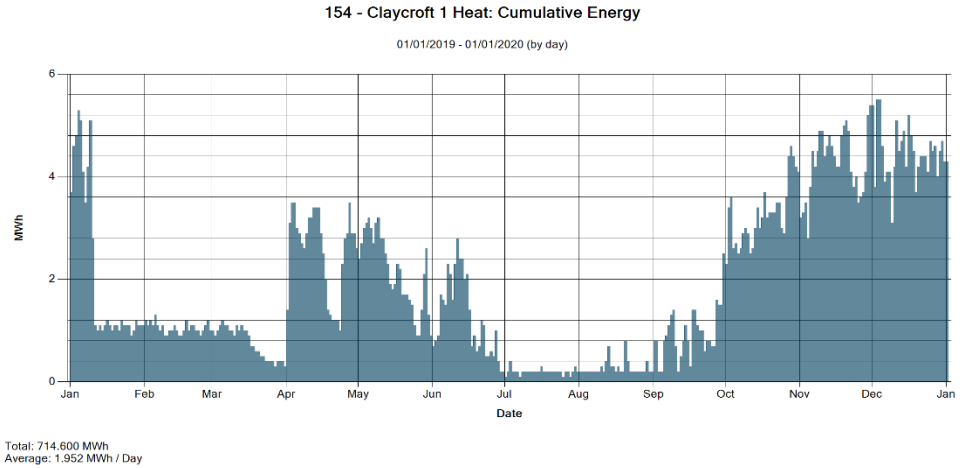

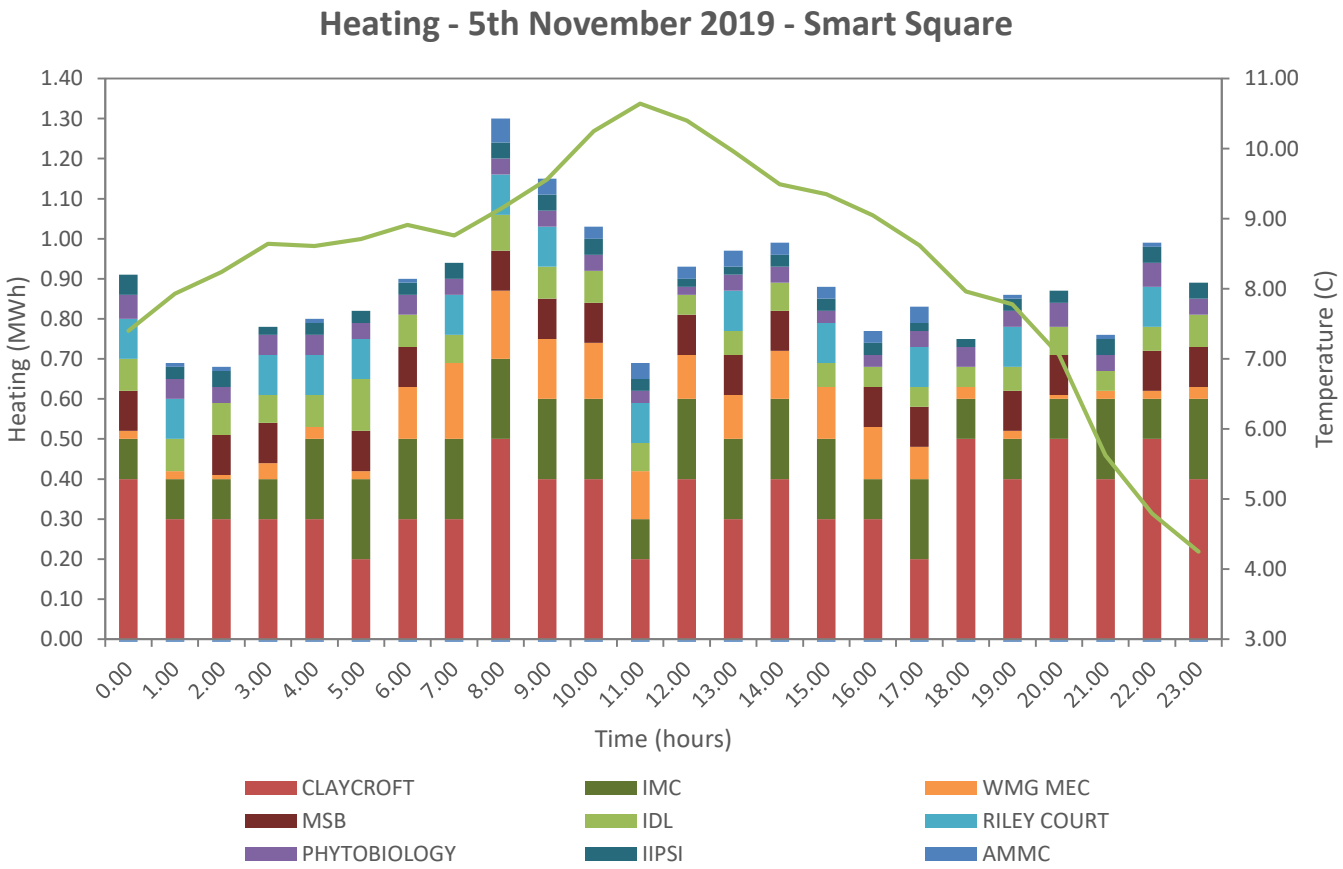

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Thanks for your attention!

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