Digitalisation on demand side ...
It's all about lowering temperatures.

An EUDP project between Viborg District Heating, Viborg Housing Association, Grundfos, Brunata and the Danish Technical University.

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Originally a family-owned Danish company
More than 100 years in business with heatcost allocation
Since 2018 a part of the Brunata/Minol/Zenner Group
Market share in DK around 40%

More than 2 million heatcost meters in business

... of this 70% continuously remotely read ... increasing
Nothing gets stronger than the weakest link in the chain...
... this applies to the district heating supply

... and inside the buildings' heating systems
... but there is already an available solution ...
Data on buildings' total consumption of district heating

+ performance data on radiators

+ consumption data from heatcost meters on radiators
Creates a screening tool for the potential for lowering the supply temperature in buildings' space heating systems.
Minimum supply temperature based on the critical flat compared to the daily average measured supply temperature for January 2022 and February 2022.

Let’s see how it works...

Nice correlation between calculated and measured temperatures...

... theory and practice are united.
What was done:

- Test case of 6 properties built in 1943-1996
- 1-wire and 2-wire heating systems
- None properties were comprehensively renovated for energy
- Only changes made to the heating curve of the heating control
- In a few cases a minor upward adjustment of pressure and flow too
Pains and gains:

- Needed information for tenants to use all radiators to achieve comfort
- Only a few resident complaints afterwards
- Lower energy consumption due to lower pipe losses in internal heat distribution
- Significantly lowered return temperature from the properties
An EUDP project between Viborg District Heating, Viborg Housing Association, Grundfos, Brunata and the Danish Technical University has uncovered the possibility of low-temperature district heating in older buildings at the same time as a huge savings potential - Only using data from existing main meters and secondary meters.

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