A way to develop DH by including not only heat delivery, but also decentralised heat supply

Prosumers – consumers that act both as heat users and producers of heat

Boilers and other heat sources that is owned by the DH-company or by a third part
A part of
Fjärrsynsprojekt: Små värmekällor – kunden som prosument
Small heat resources – the customer as prosumer

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Decentralized heat resources:

- Solar thermal
- Excess heat from cooling machines, (data centres, shopping centres and sports arenas).
- Excess heat from industrial processes, (casting, moulding or excess steam)
- Old boiler that no longer is in permanent use but could be used temporarily
- Waste dump with methane aggregation and burning
- Crematorium
- Heat pumps (when cheap electricity)
- And a lot more
Decentralized heat generation
Return/return connection (R/R)
- Affects return temperature in the DH-network
- Can’t produce its own flow in the DH-network (limited heat power)
- Can feed in at any temperature higher than the return temperature
- Easy control principle

Return/supply connection (R/S)
- Does not affect return temperature in the DH-network
- Can produce its own flow in the DH-network
- Must deliver heat at a given (high) temperature
- Much more complicated control principle than R/R

Rarely used:
- Supply/return (S/R) – over heat protection system – few hours a year and low heat power feed in
- Supply/supply (S/S) – over heat protection system, more complicated than S/R but easier than R/S
Decentralized heat generation

DH Secondary side | DH Substation

ST on secondary side

A
Maybe

Possible

Our strategy today

System layout 1

System layout 2A

System layout 3A
Thank you for your attention