
MAX IV
”Prosumers”
Price tariff for LTDH consumers
Price tariff for small LTDH producers

Price tariff for LTDH *consumers* – *background*

- Supply temperature 65 °C
- Return temperature 35 °C.
- A new type of distribution pipes made out of plastic → easier and cheaper to build.
- A solitary system with constant heat production (cost).

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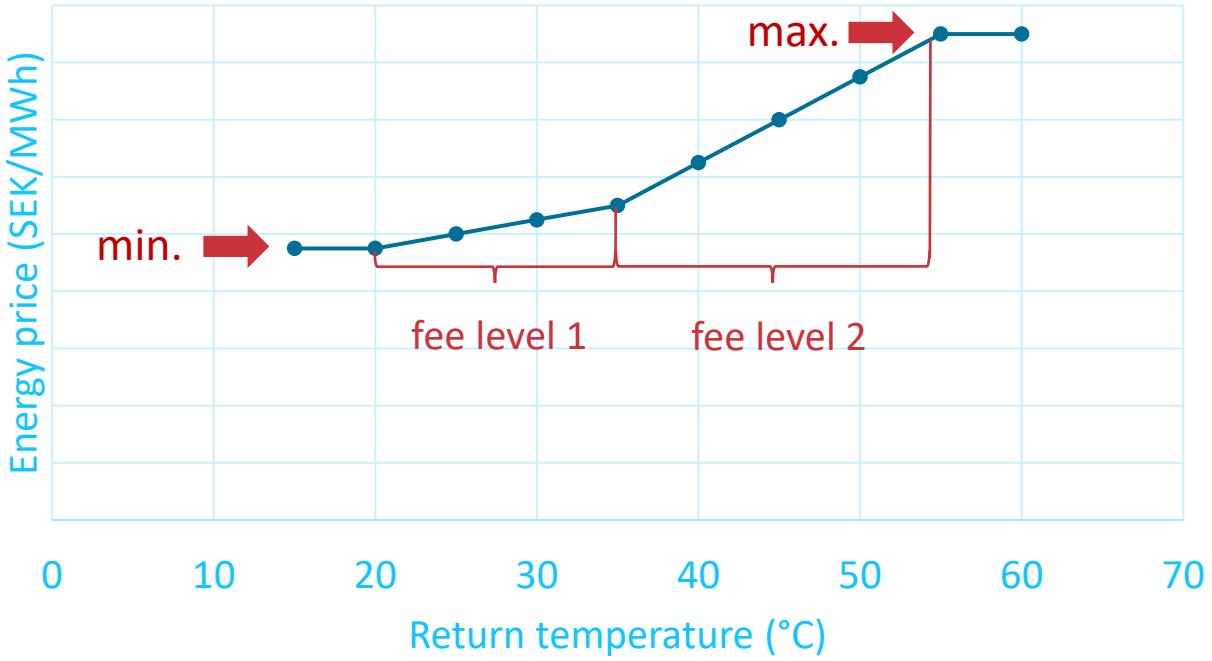
Price tariff for LTDH *consumers* – *result*

- Connection fee
- Minimum energy price and maximum energy price
- Energy price based on the past month's average (volume balanced) return temperature, in two levels:
  - 20 – 35 °C: fee level one, X SEK/°C
  - 35 – 55 °C: fee level two, Y SEK/°C



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Volume balanced return temperature

- The volume balanced return temperature is obtained by subtracting the transferred heat from the supply temperature.

$$\text{Volume balanced return temperature [°C]} = \text{Supply temperature [°C]} - \text{Transferred heat [°C]}$$

$$= \text{Supply temperature [°C]} - \frac{\text{Transferred energy [kJ]}}{Cp_{water}\ [kJ/(kg, °C)] * \text{Transferred volume } [m^3] * \rho_{water}\ [kg/m^3]}$$

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Benefits and development potential

- Simple for customers to understand.
- Favors well-functioning substations.
- Soft values can include:
  - Provide heat exchanger installation instructions to the customers.
  - Offer help with dimensioning of heat exchangers as well as maintenance.
  - Perform yearly maintenance visits.
  - Apply remote reading and control of substations.

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Prosumers – pros, cons and questions

DH RESILIENCE

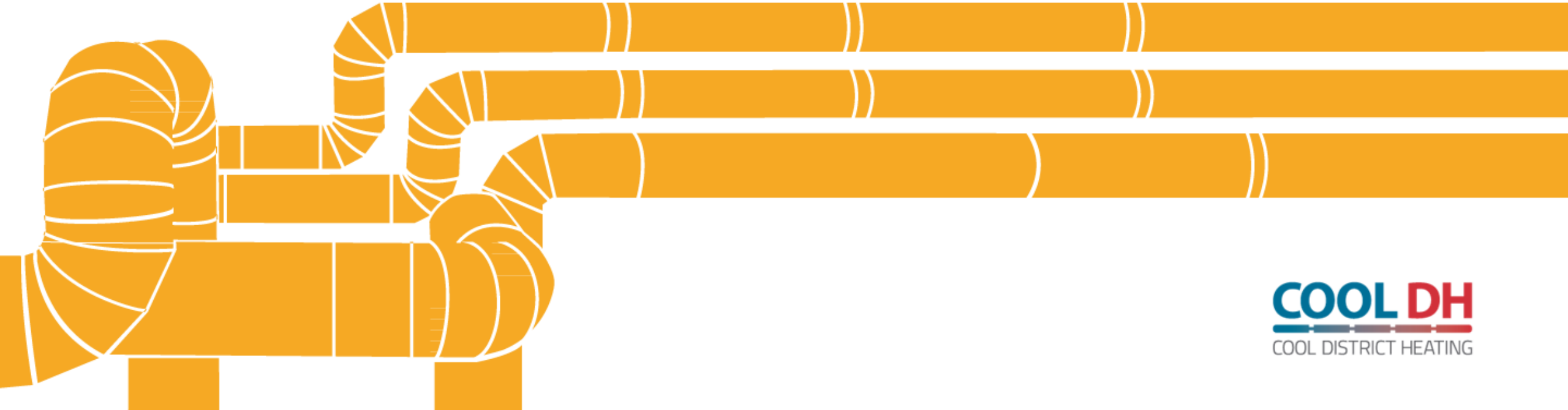
ALTERNATIVE USES OF CAPITAL

HEAT FORECASTS

HEAT QUALITY AND VALUE

PROSUMER STABILITY

INVESTMENTS & PB



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Price tariff for small LTDH *producers* – *prerequisites*

- Minimum supply temperature. (Brunnshög: 65-67 °C)
- "Alternative production cost" variable:
  - Invariant production price? → Fixed compensation! (ex. Brunnshög/MAX IV)
  - Varying production price? → "Market price" compensation! (ex. Stockholm Exergi Ltd.)
- Outdoor temperature-related prerequisites

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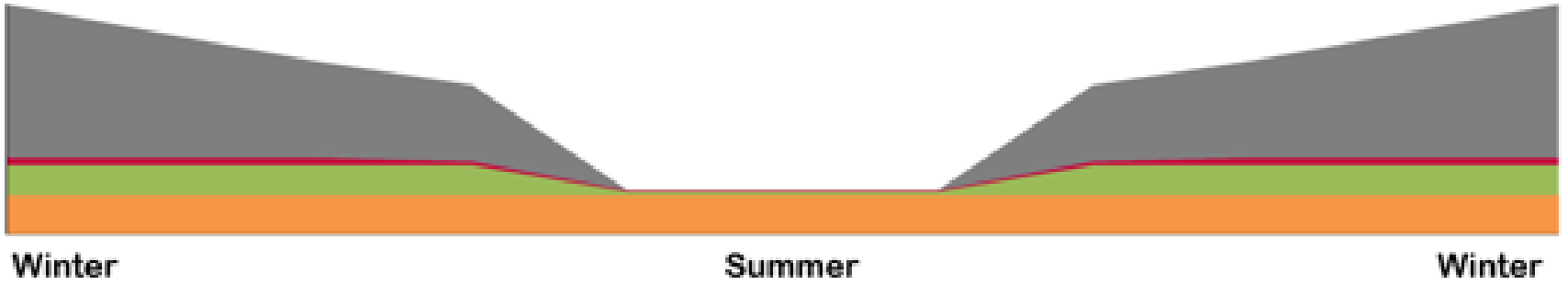
What is the surplus heat substituting?



- "Outdoor temperature" variable:
  - Fixed outdoor temperature demand of YY °C,
    … and/or the compensation decreases with increasing outdoor temperature.
  - Fixed season demand,
    … and/or the compensation varies with the seasons.

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Thank you!

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