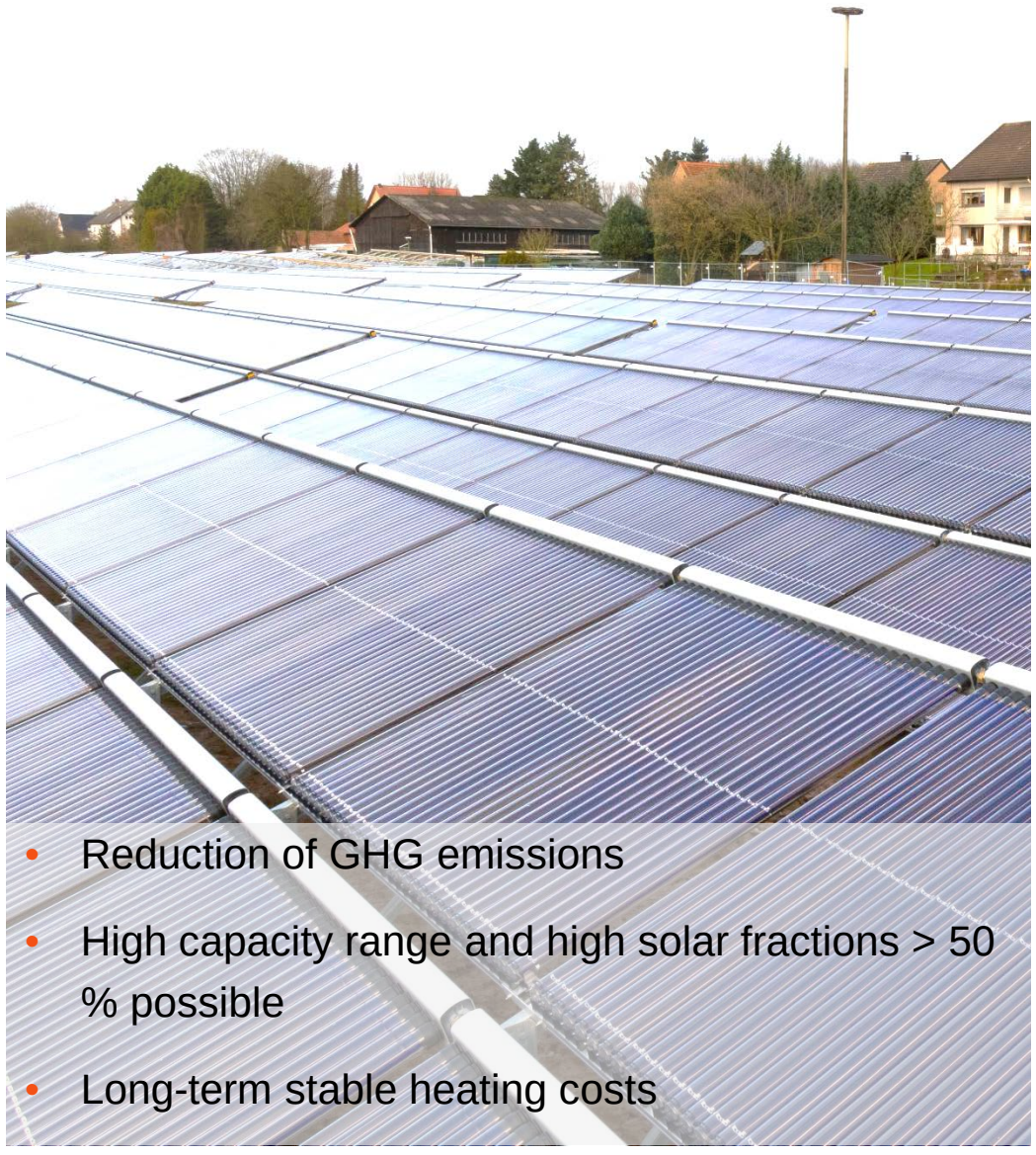
Decarbonisation of municipal heat supply with solar district heating



- Reduction of GHG emissions
- High capacity range and high solar fractions > 50 % possible
- Long-term stable heating costs

Photo: Guido Bröer

- Good financial incentives
- Compatible and competitive with other renewable energies in district heating
- Increasing biodiversity

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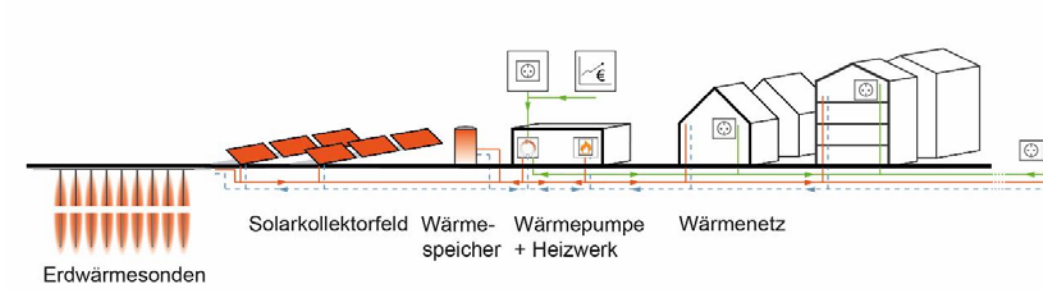
Ludwigsburg-Kornwestheim „SolarHeatGrid“

- Municipal utilities Ludwigsburg-Kornwestheim GmbH
- Collector area: 14.800 m² / 9 MW
- Heat storage: 2.400 m³
- Annual yield: 5.500 MWh/a

Pictures: Stadtwerke Ludwigsburg-Kornwestheim GmbH

Hechingen „Killberg IV“



- 7.000 m² solar thermal system (67,4 % solar fraction) + 18.000 m³ pit thermal energy
- Combination with geothermal probes + heat pump (27,6 % share of coverage und 25 % solar regeneration)
- Pit thermal energy storage build on landfill site
- 95 % fossil-free heat generation

Pictures: Solites

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