# Solar District Heating
## New paths on a solid foundation

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Bodo Schmülling & Simon Martz
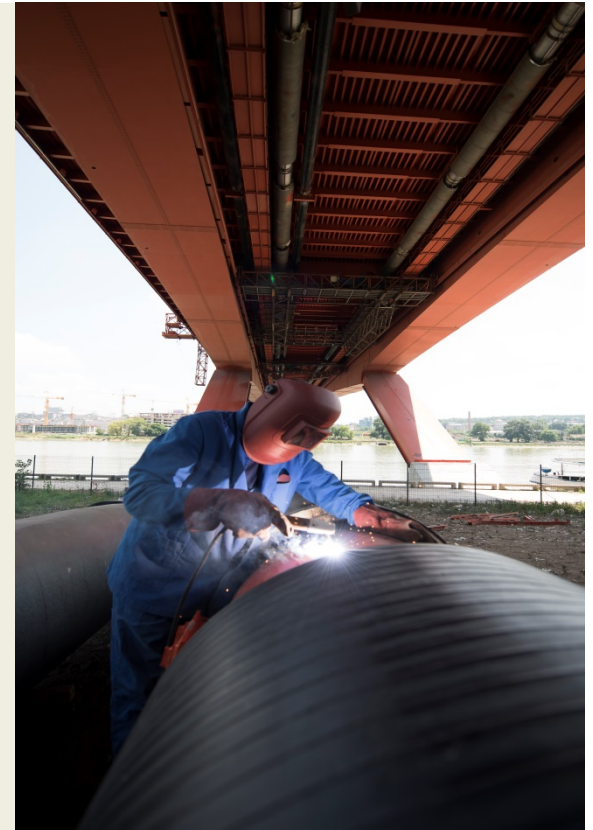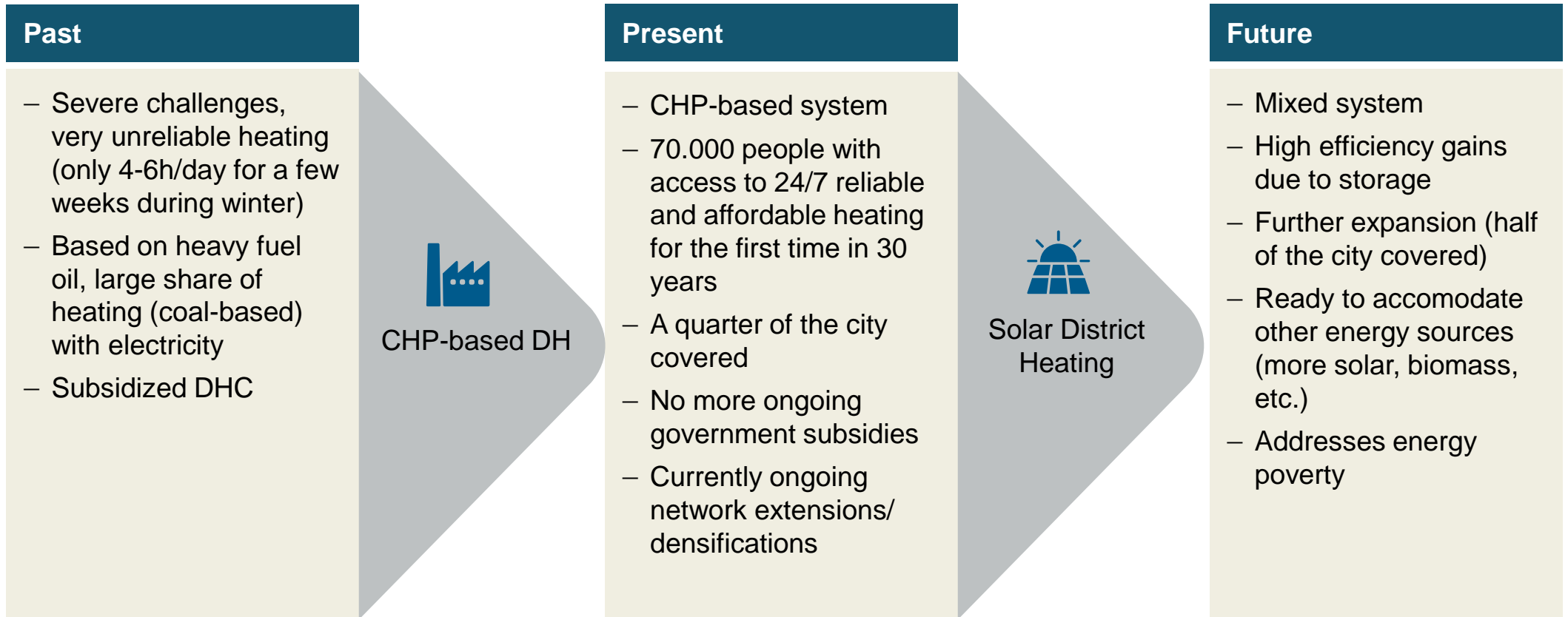
Bank aus Verantwortung

**KfW**

# A solid foundation
## KfW in Southeast Europe

- **Leading institution in financing DH systems in SEE**
  - **~EUR 135m invested since 2001**
  - **~EUR 110m under implementation/advanced planning stage**

- Focus so far on
  - Serbia – Five phases of DH rehabilitation and new biomass project
  - Kosovo – CHP project and network rehabilitation/extension

- Investments within existing district heating systems:
  - Modernization of existing equipment as well as fuel switch (gas, biomass, solar thermal)
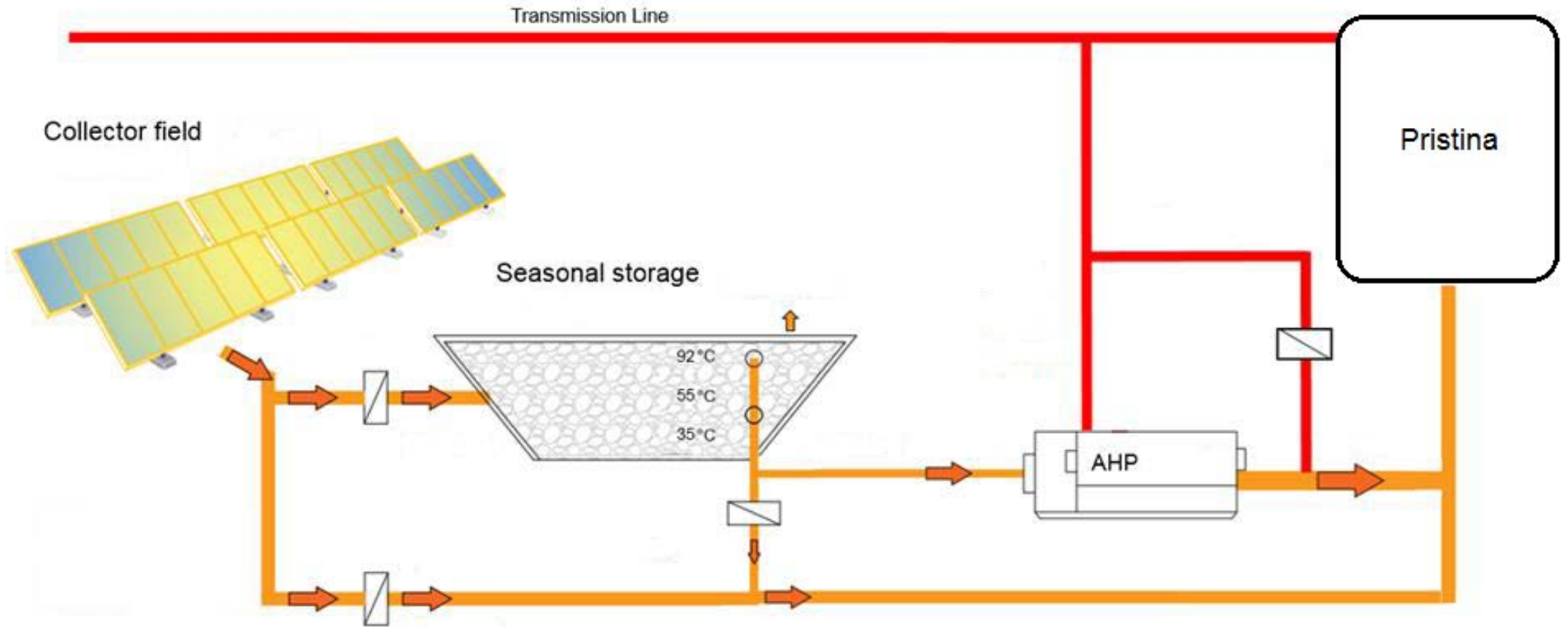  - Modernization and extension of networks

# Case study Pristina
## KfW and Termokos

### Past

- Severe challenges, very unreliable heating (only 4-6h/day for a few weeks during winter)
- Based on heavy fuel oil, large share of heating (coal-based) with electricity
- Subsidized DHC

**CHP-based DH**

### Present

- CHP-based system
- 70.000 people with access to 24/7 reliable and affordable heating for the first time in 30 years
- A quarter of the city covered
- No more ongoing government subsidies
- Currently ongoing network extensions/ densifications

**Solar District Heating**

### Future

- Mixed system
- High efficiency gains due to storage
- Further expansion (half of the city covered)
- Ready to accomodate other energy sources (more solar, biomass, etc.)
- Addresses energy poverty

# New paths
## Why Solar District Heating?

### A true „transitional fuel"

- Part of a decentralized system with multiple inputs (e.g. biomass, existing fossil fuel based solutions)
- Smooth, step-by-step transition to carbon-free heating network

### Builds upon existing infrastructure

- SEE with large number of existing DH networks
- Efficient allocation of resources through fuel switch and network rehabilitation/extension
- High synergies with existing solutions

### Replaces heavily polluting energy sources

- Many systems still running on (heavy) fuel oil
- Inefficient usage of electricity
- Individual coal/wood ovens

### Heating as a building block for the Energiewende

- Large share of energy consumption for heating and cooling
- Large contribution potential to NECP/NAP

>>> Thank you for your attention