

Combined power and heat supply: Attractive business models overcome the sector boundaries

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DECARBONISATION

Get out of fossil fuels

DECENTRALISATION

Power to the people

DIGITALISATION

Flexible and in real time

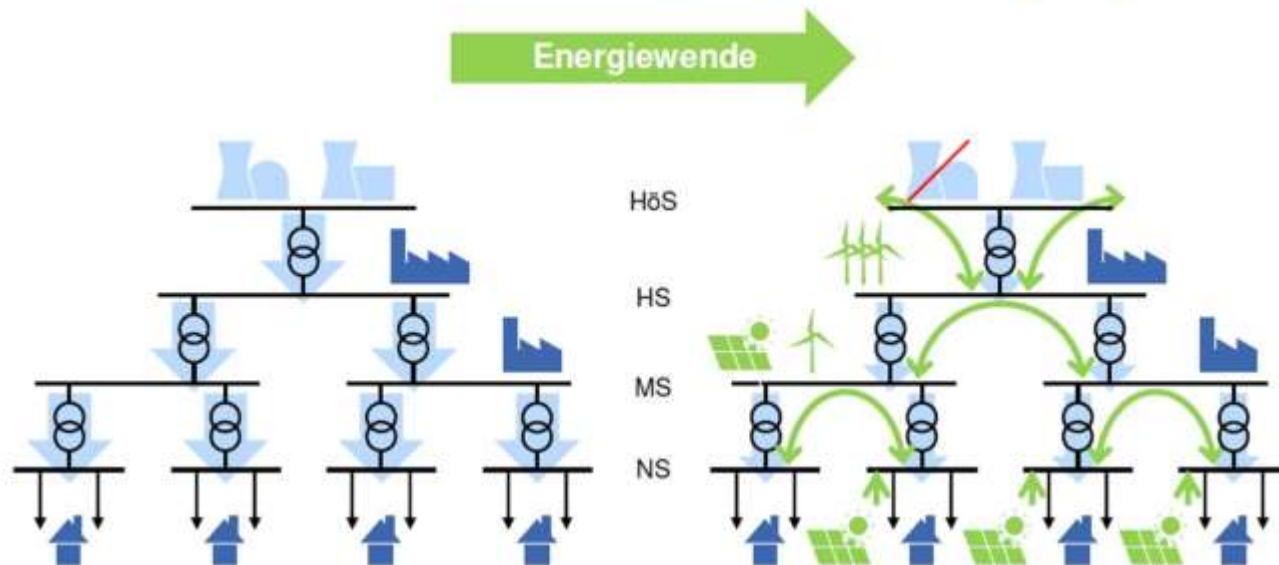
DEMAND RESPONSE

Consumers become flexible

revolution

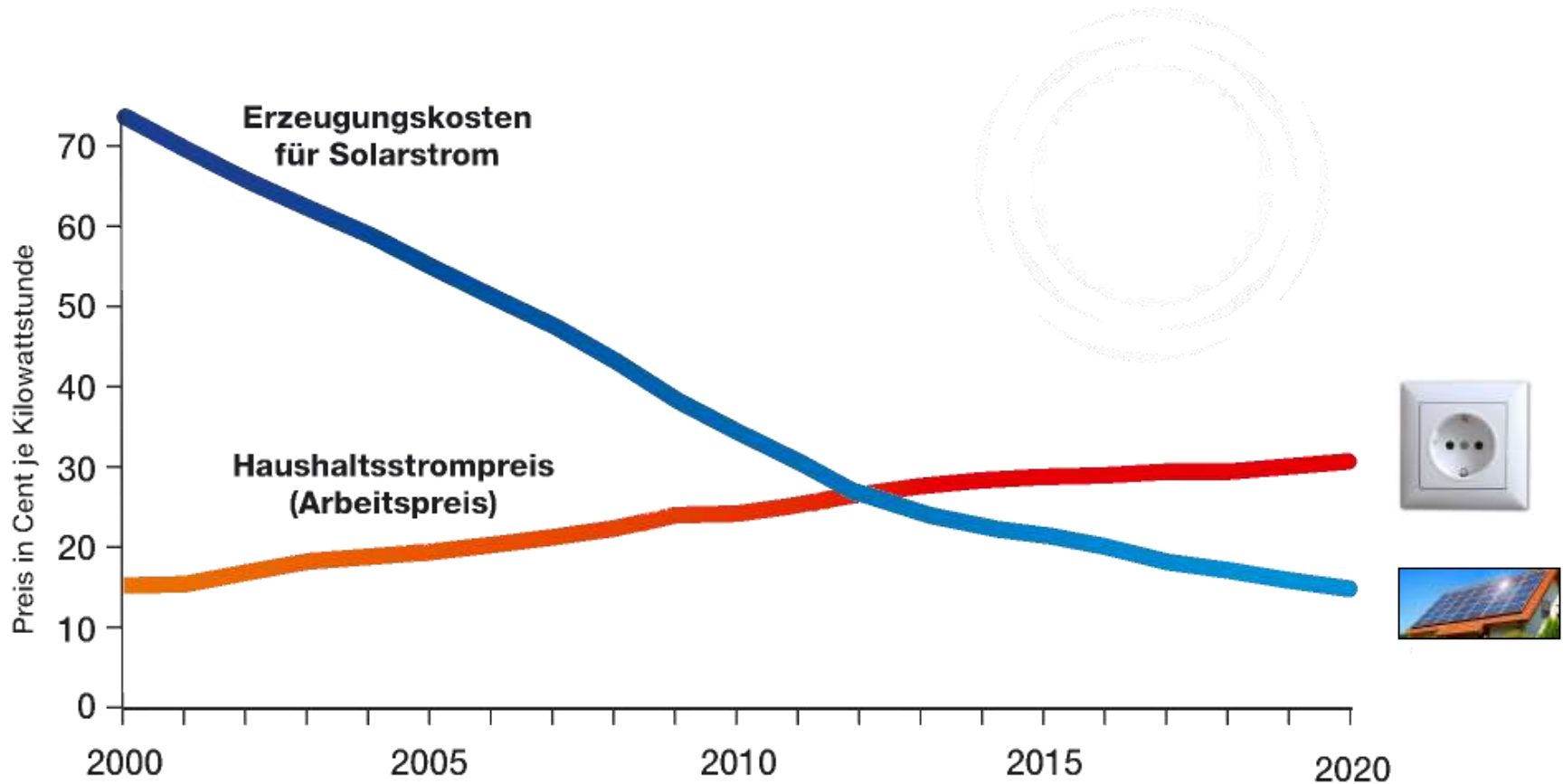


Central generation capacity is increasingly supplemented by decentralized generation



Energy transition mainly happens on local supply levels

Solar power since 2013 cheaper than household electricity



www.solarwirtschaft.de

Quellen: Bundesumweltministerium (Leitstudie 2010), BSW-Solar (PV-Roadmap)

Decentral solutions breed new players



Power/Heat/Mobility overlap by ...

... new TECHNOLOGIES

... new BUSINESS MODELS

... adapted FRAMEWORK CONDITIONS



**Residential area
Suurstoffi, Zürich**

Since 2010 power & heat supply of
- 1.500 residents
- 2.000 students

Intelligent local energy network:

Solar Thermal

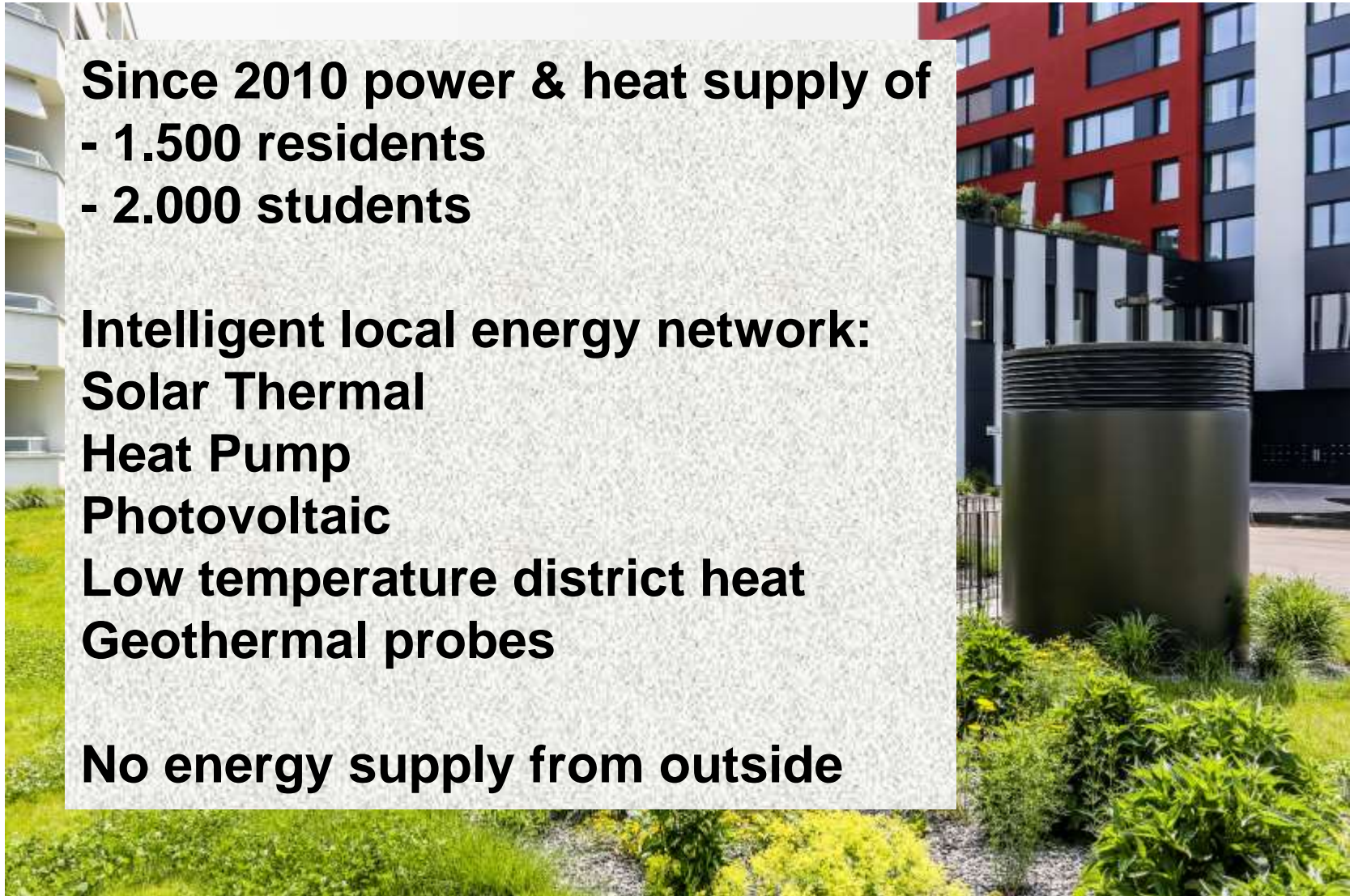
Heat Pump

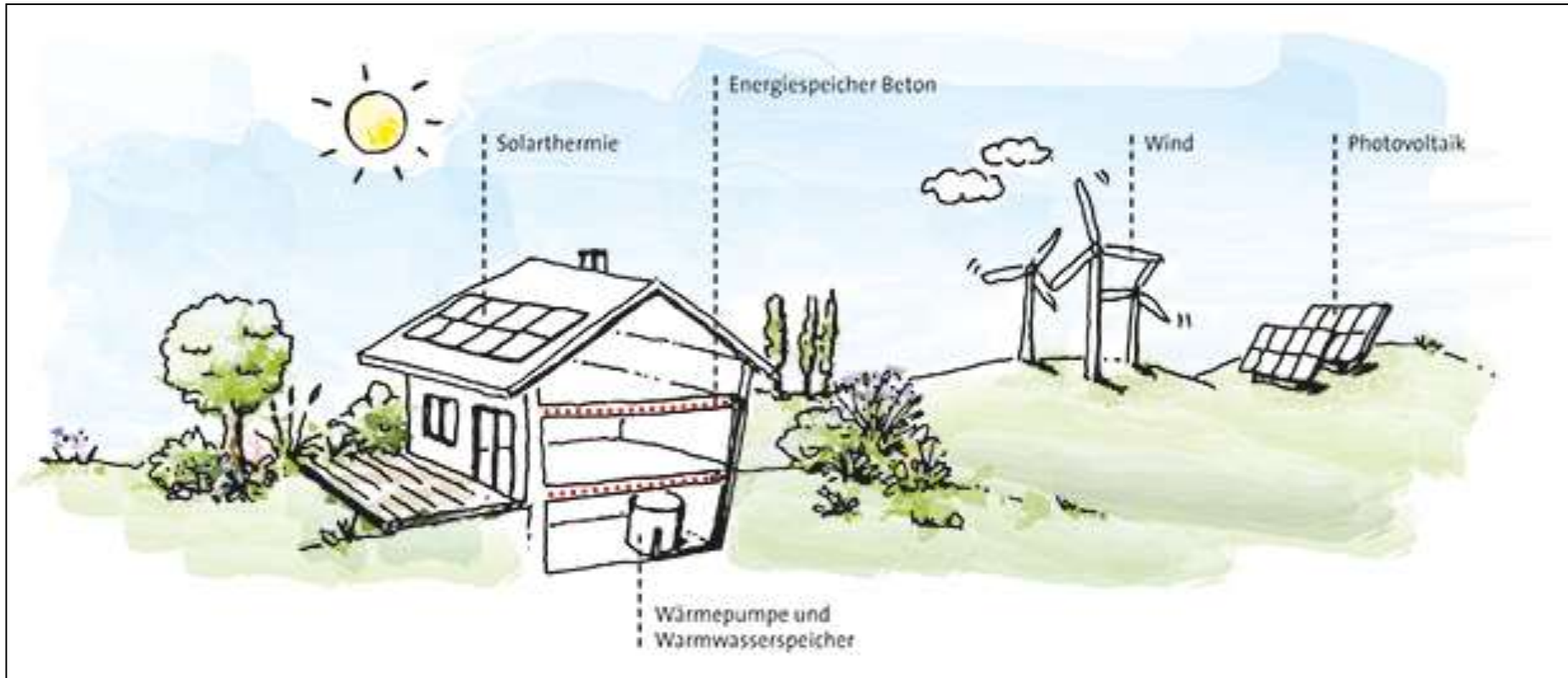
Photovoltaic

Low temperature district heat

Geothermal probes

No energy supply from outside

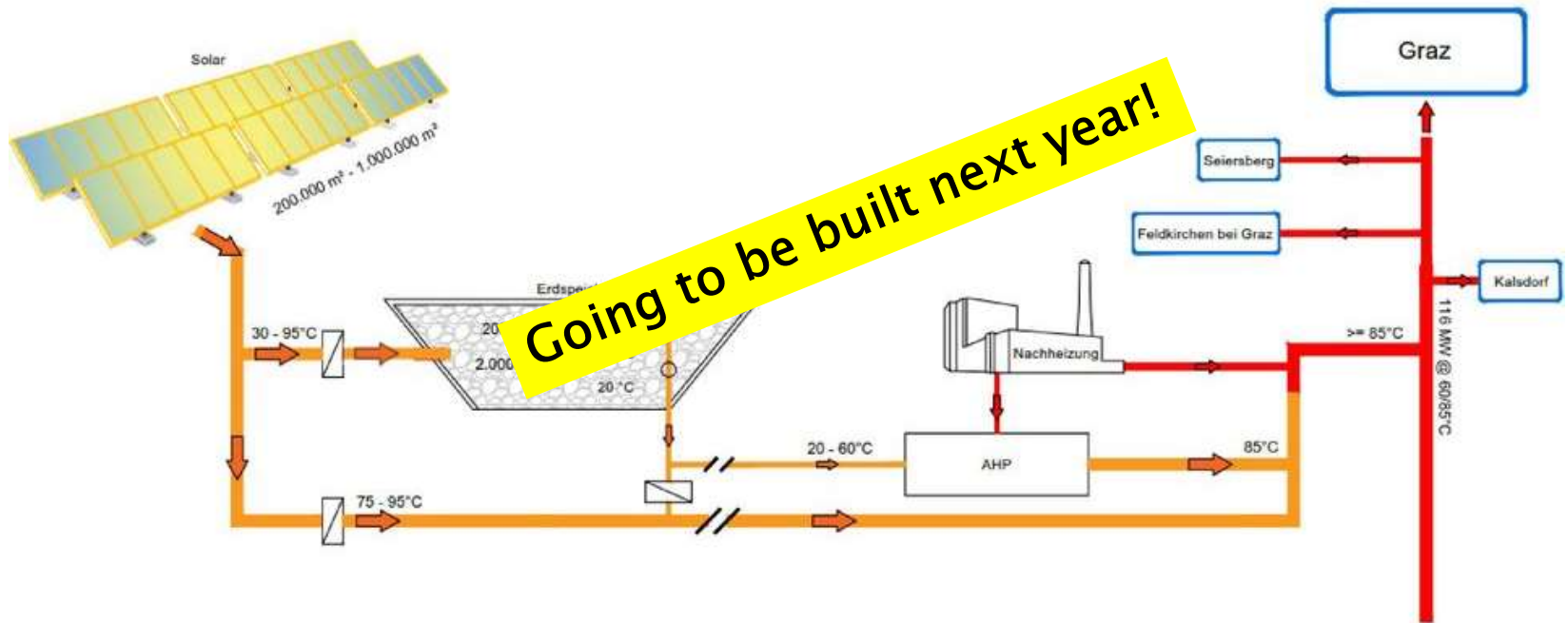




The house as a flexible storage

Power/Heat/Mobility @ home





Quelle: SOLID

Integrated District Heating system:

- combination of solar, electricity market, gas peak load
- cheap as system configuration: 3,5 Cent/kWh heat price
- Turnkey provider

**There are many
business models,
still nobody
has thought of!**

