



IEA Geothermal



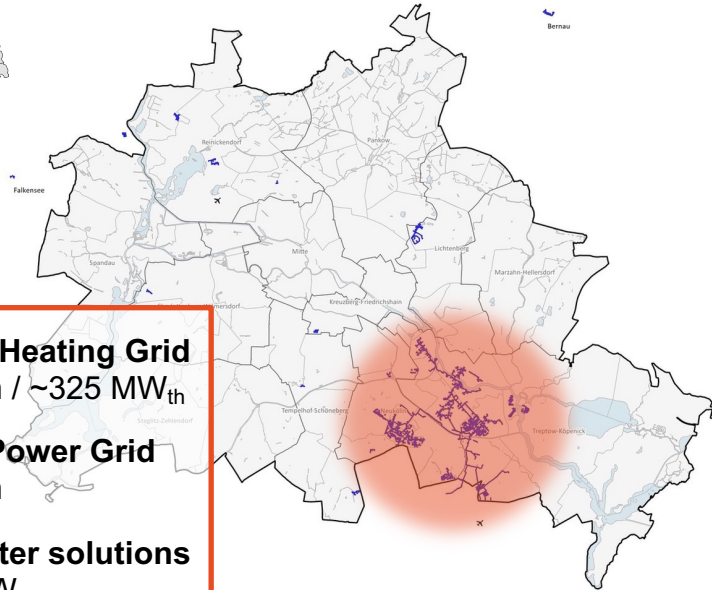
# ATES- GeoSpeicherBerlin

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Project Manager Innovative Systems & Strategic  
Corporate Development

28.02.2024

# BTB – Energy Supplier in Berlin



## District Heating Grid

~170 km / ~325 MW<sub>th</sub>

## Public Power Grid

~120 km

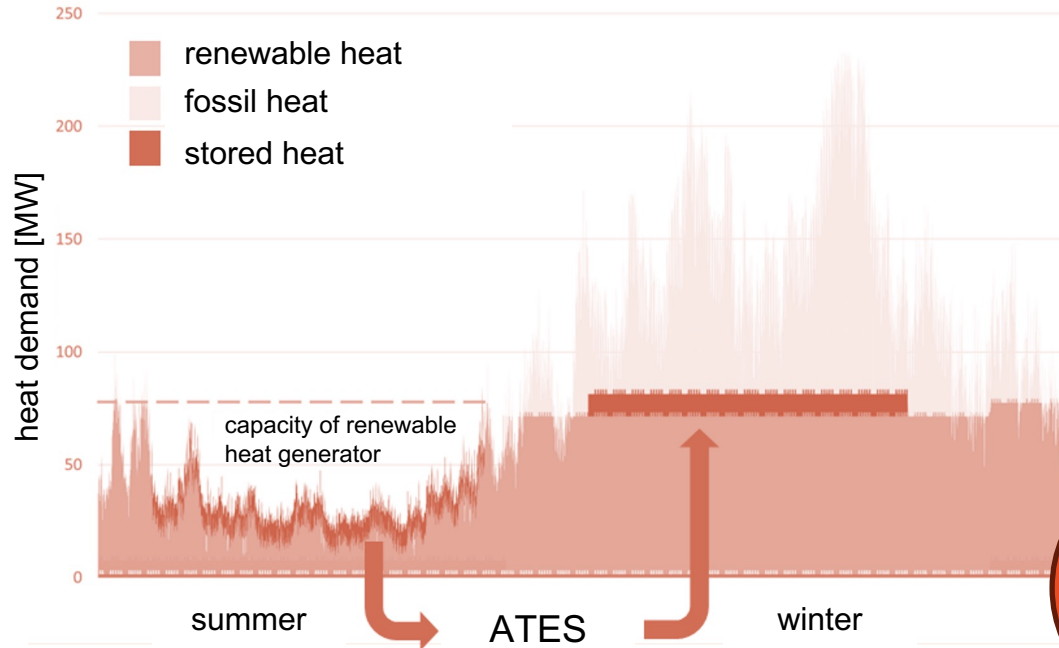
## 75 Quarter solutions

~100 MW<sub>th</sub>

- Employees: ~180
- Customers/Energy Quantity:
  - Heat/Cold: ~2,200 - ~1,000 GWh<sub>th</sub>/a
  - Power: ~2,400 - ~270 GWh<sub>el</sub>/a
- Revenue: ~190 m€/a
- Investments: ~35 m€/a
- Shareholder: E.ON SE

# Our Motivation to Build an ATES

District Heating Grid

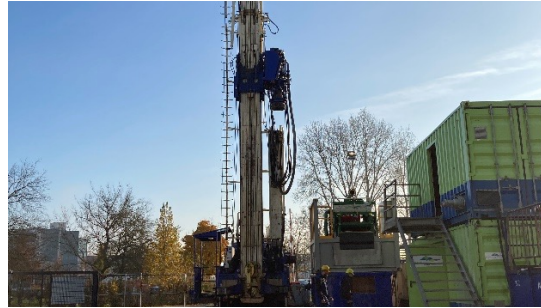


**Germany's largest  
heat storage**

○ storage capacity:  
**>30 GWh**

**CO<sub>2e</sub>  
avoidance:  
> 5 kt/a**

# Research @ Adlershof



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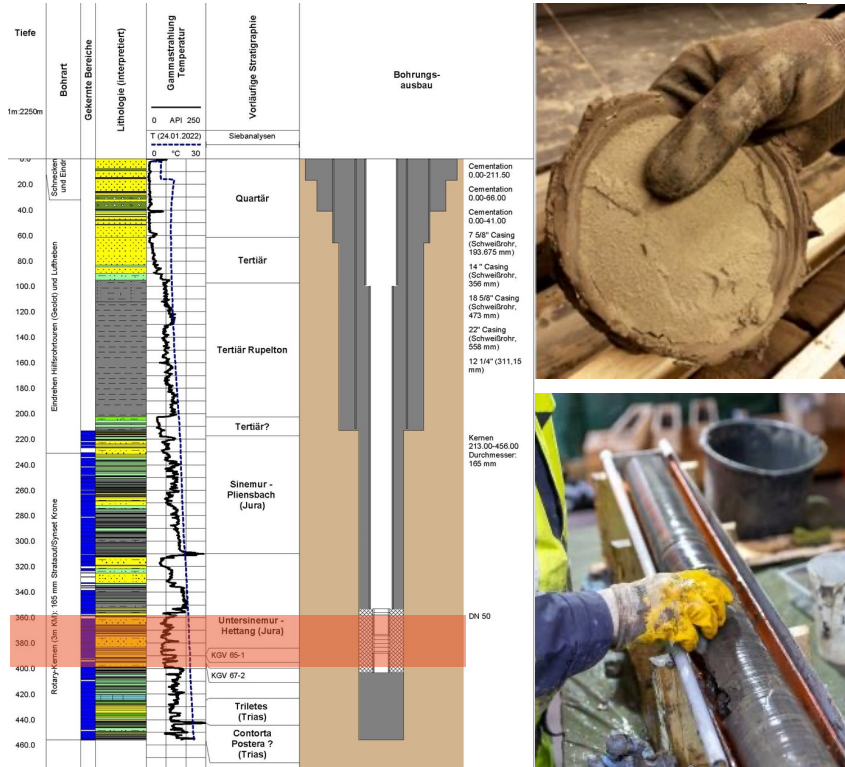


on the basis of a decision  
by the German Bundestag



Helmholtz-Centre Potsdam GFZ realized an exploratory drilling in scope of their project GEOFERN in 2021/22 Source: GFZ

# Research @ Adlershof

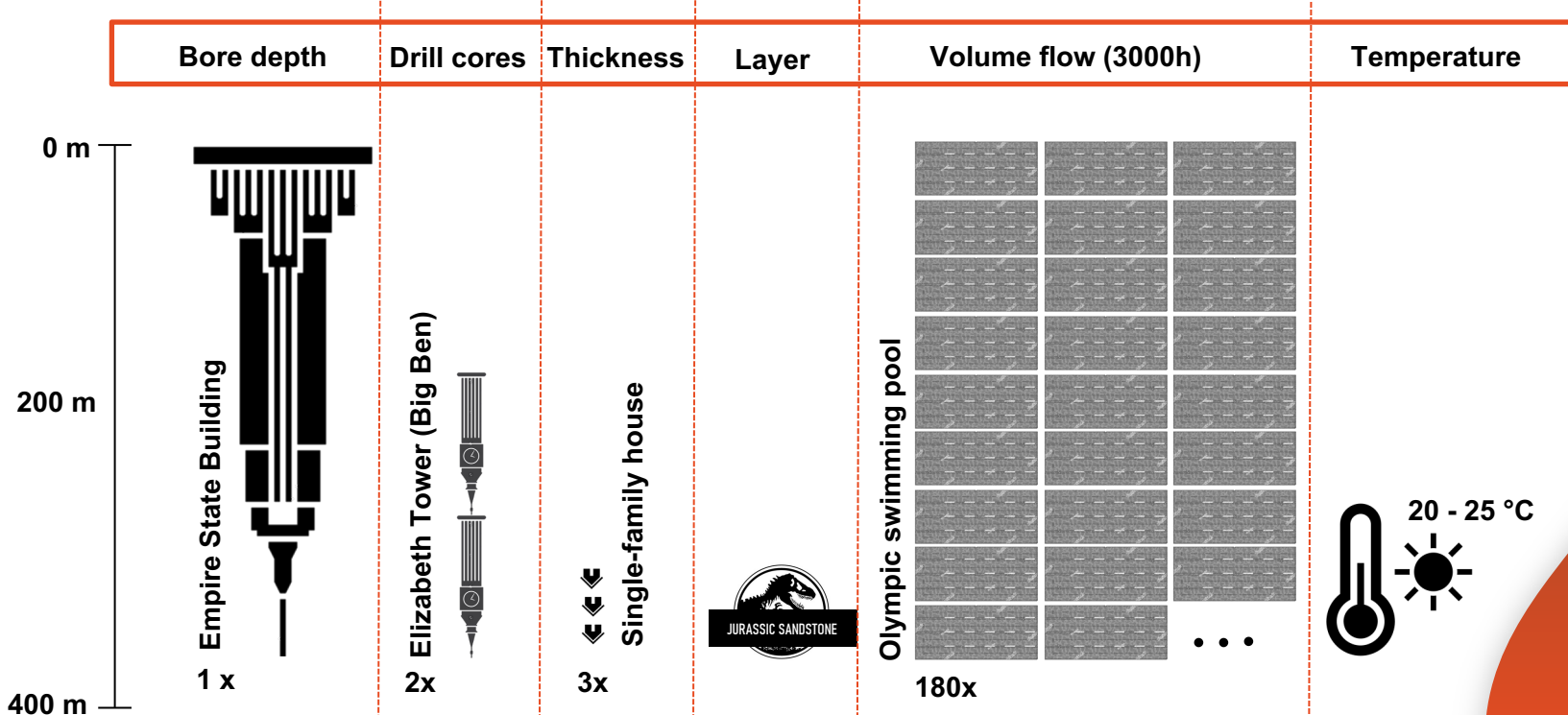


## Results of the analysis of the drill cores from the exploratory borehole

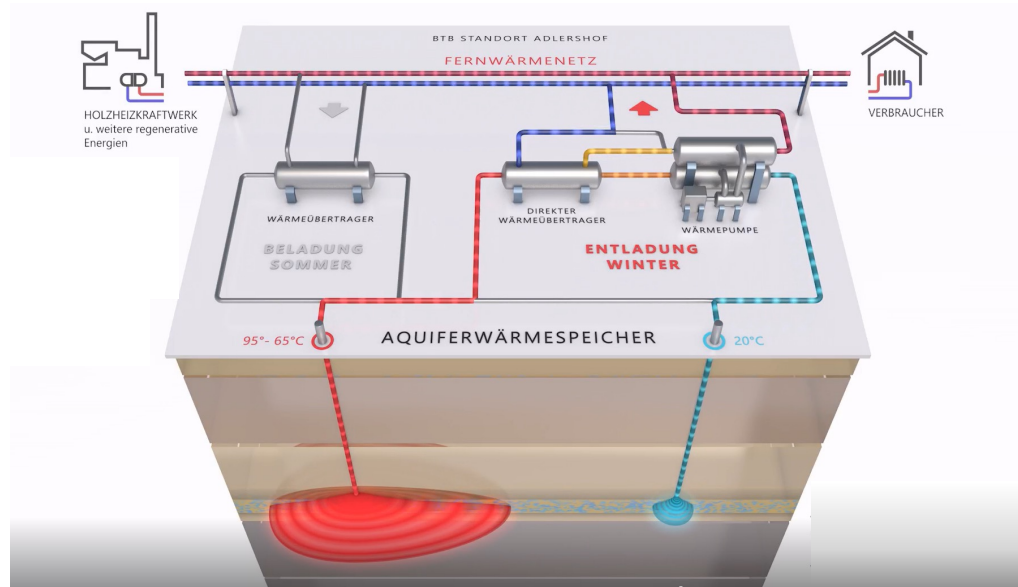
- Geological horizon: jurassic sandstone Hettang
- Depth: 350 – 400 m
- Thickness: in total up to ~30 m
- Productivity index: ~100 m<sup>3</sup>/h\*MPa
- Possible volume flow: ~150 m<sup>3</sup>/h
- Temperature: 20 - 25 °C

Helmholtz-Centre Potsdam  
GFZ realized exploratory  
drilling 2021/22

# Research @ Adlershof



# Integration into a District Heating Grid



- Storing temperature: up to 95 °C
- Expected heat recovery factor: up to 90 %

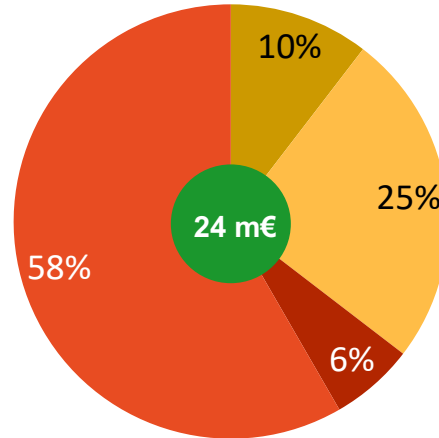
[Video GeoSpeicherBerlin](#)

# Living Lab GeoSpeicherBerlin

## Partner



## Investment



## ATES

- Research
- Implementation

## Heat Pump System

- Research
- Implementation

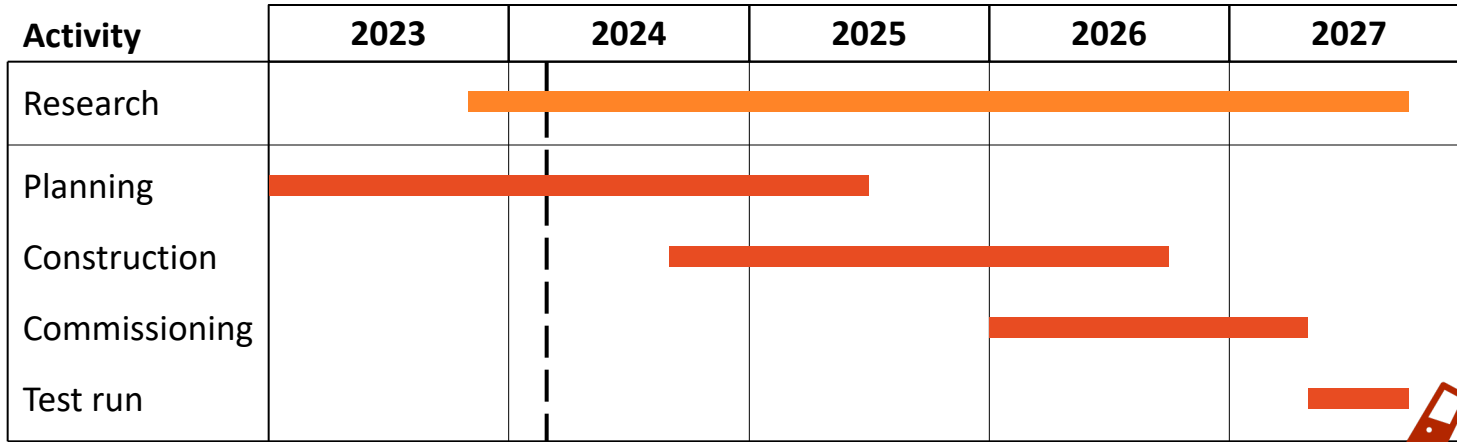
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# Timeline



▲  
28.02.2024



# Contact

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