

accenta.

smart building energy storage



Decarbonizing building thermal energy through smart heat storage

accenta . heatstorage

in brief

1. POWER to HEAT system

Heat pump for building heating and cooling with waste heat recovery

Electric power source: photovoltaic or grid

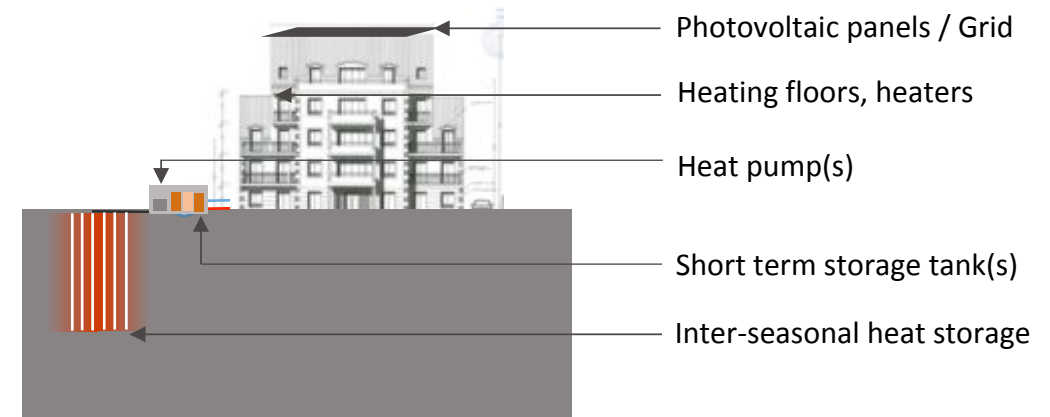
2. HEAT STORAGE system

BTES : Borehole Thermal Energy Storage

Short term heat storage tanks

3. PLC system

for smart control of AHS operation



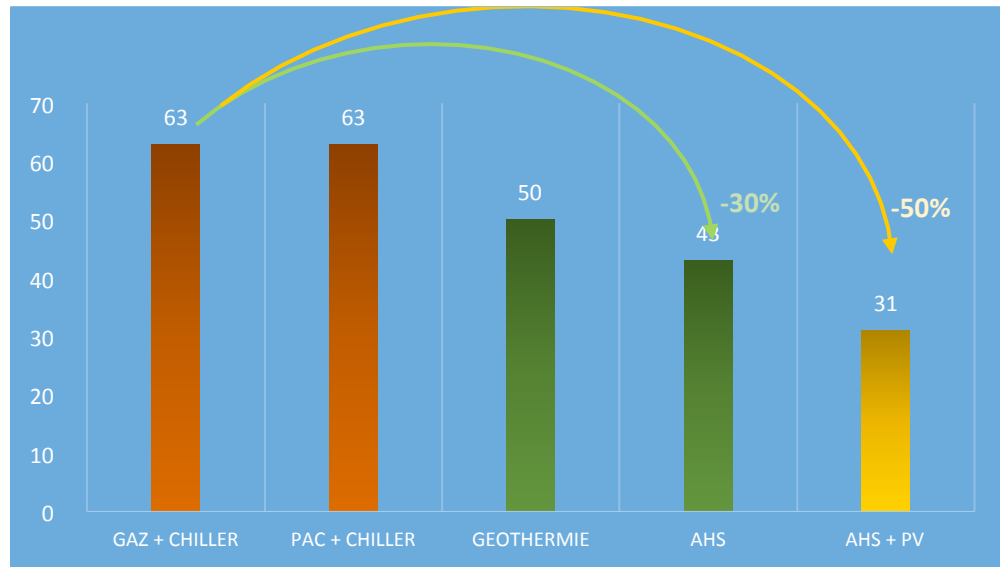
Key benefits

- Packaged solution with « crisp » design
- Large geological scope of application
- Small real estate footprint
- Fast implementation
- Long lifespan
- No specific maintenance requirements
- Low carbon footprint

System performance

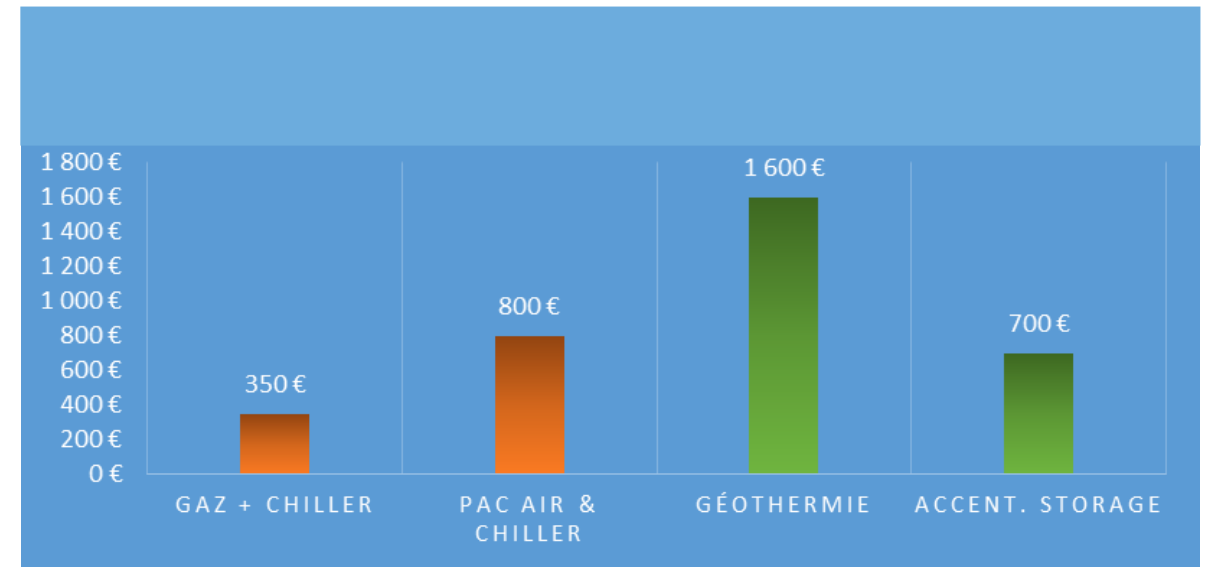
Business case: new tertiary building RT 2012 compliant – Paris area

Primary energy consumption benchmarking
(kWh / m² x year)



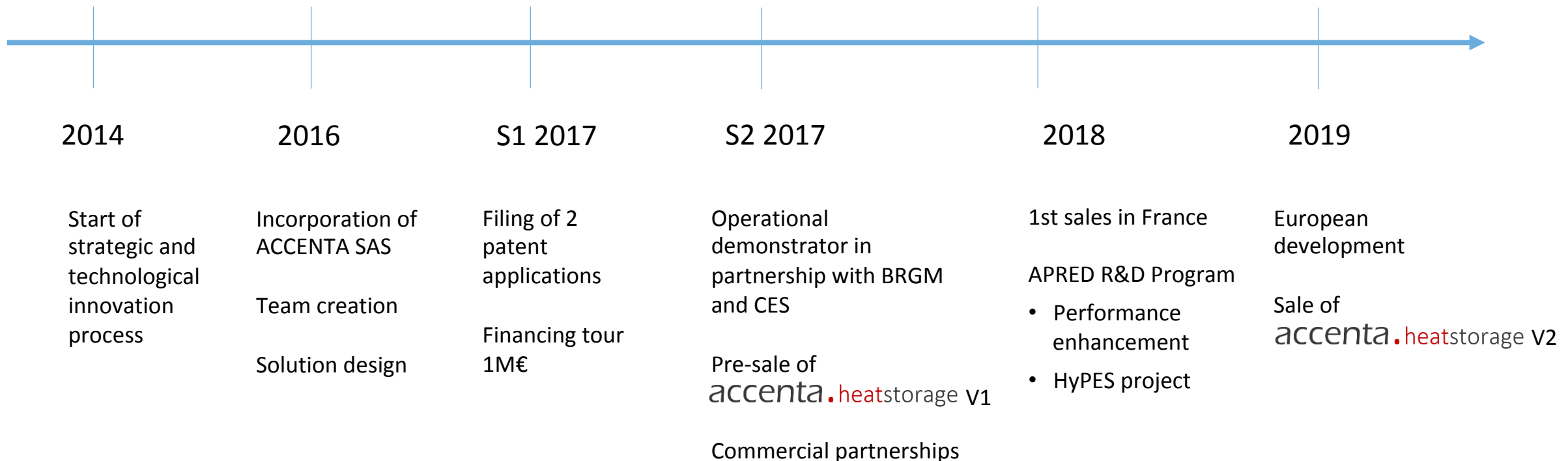
Energy efficiency: up to 40 %
Carbon efficiency: up to 90 %

Capital expenditure benchmarking
(€ / kW)



Capex vs. standard heat pump : - 12 %
Opex vs. standard heat pump : - 34 %

Solution development status





MERCI DE VOTRE ATTENTION !

accenta.