

ENERGY STORAGE

Key

>1000 MW 10-100 MW
500-1000 MW 100-500 MW

>MONTHS MINUTES-HOURS
WEEKS DAYS

>\$100/KWh <\$1/KWh
\$10-100/KWh \$1-10/KWh

>USD¢100/KWh <USD¢1/KWh
USD¢10-100/KWh USD¢1-10/KWh

COMMERCIAL CONCEPT
PILOT R&D

H Heating
C Cooling
P Power
CHP Combined Heat & Power
T Transport

SIZE

DURATION

CAPEX

LEVELISED
STORAGE
COST

READINESS

ISSUES

MARKET



HEAT
VAULT



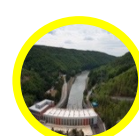
BATTERIES



FLOW
BATTERIES



MATERIAL
BATTERIES



PUMPED
HYDRO



HYDROGEN



COMPRESSED
AIR



GRAVITY



Scarce materials
Cycle time
Short Life

Scarce materials
Cycle time
Short Life

Scale
Efficiency
Short Life

Geography
Energy density
Lifecycle

Scarce materials
Production cost
Storage & Transport

Economics
Efficiency
Scale

Economics
Location
Short Life

H.C.P.CHP

P.T

P

P

P

H.P.T

P

P