

Liquid Air Energy Storage

Why is it critical for the energy industry?

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Redefining Flexibility and Sustainability

Liquid Air Energy Storage (LAES), the missing link to Net Zero

Solid performer

- 30+ years life
- No supply chain risk
- Negligible degradation
- Location agnostic and low incremental footprint
- No minimum uptime or downtime

Flexible solutions and value stacking

- Decoupled charge, discharge and storage
- Eliminate Grid congestion
- Transmission deferral
- Integrates with industrial thermal processes



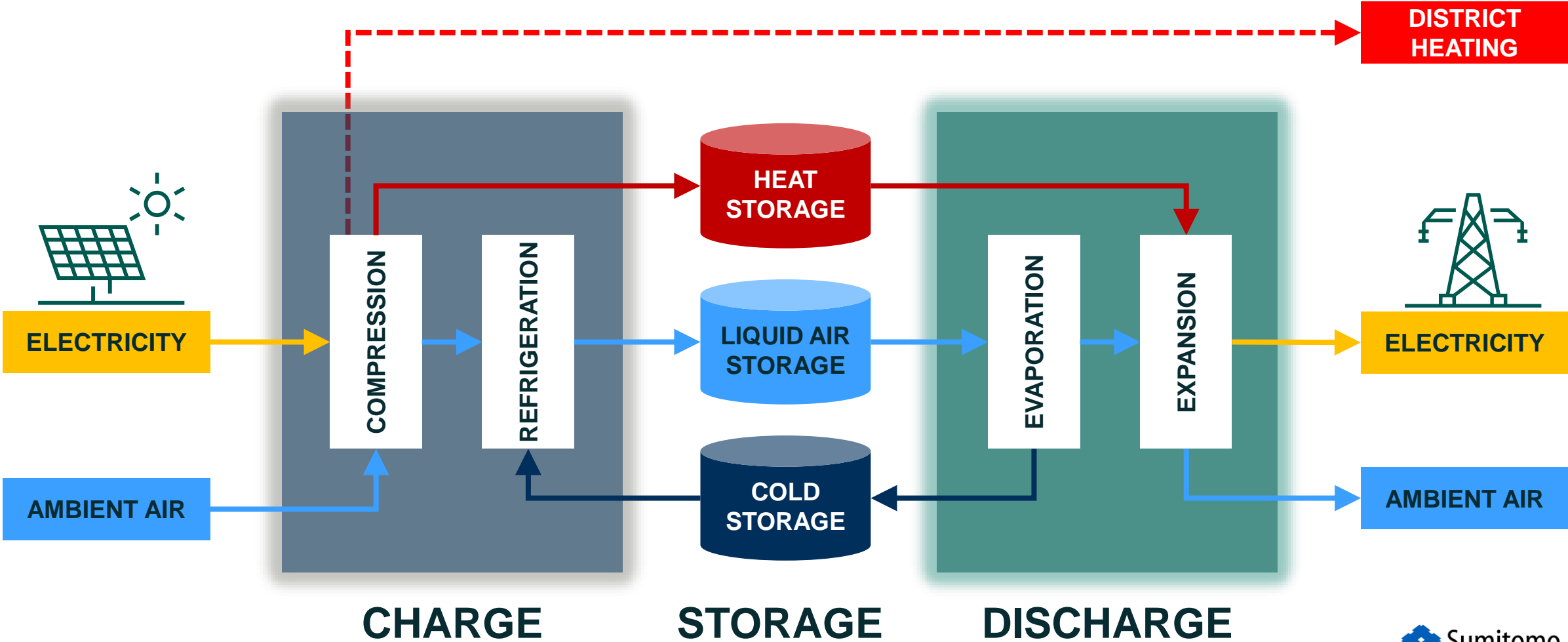
Grid security

- Supports renewable energy integration by injecting rotational inertia in the grid
- Capacity reserve, standby reserve, spinning reserve
- Baseload renewable generation

Enabling sustainable societies

- Complies with circular economy
- Storage of clean air, unlimited harnessable potential
- No dependency or impact on environment
- Zero emissions to air and water
- Job opportunities through operation, maintenance and local manufacturing

LAES is utilizing clean air to store energy



Joint Implementation of LAES Commercial Demonstration

Sumitomo Heavy Industries and Hiroshima Gas Co., Ltd

- Discharge: **5 MW**
- Charge: **4 MW**
- Duration: **4 hours**
- The LAES plant is utilizing waste cold from the Hatsukaichi LNG terminal

Joint development by Sumitomo Heavy Industries and Hiroshima Gas Co., Ltd



<https://www.shi.co.jp/english/info/2023/6kgpsq0000003cla.html>

Thank you

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