

Long Duration Energy Storage Council



Report highlights¹

60-70%

renewables of overall capacity for widespread LDES deployment

~60%

LDES cost reduction expected by 2040

Leading to ...

\$1.5-3 tr

Total investment in LDES required by 2040

1.5-2.5TW

Total deployed LDES by 2040

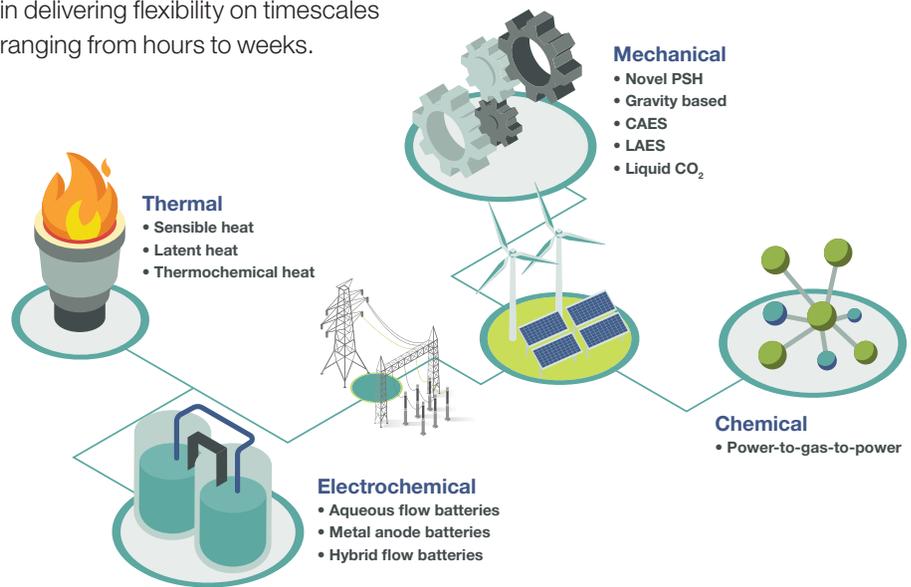
>50%

LDES portion of all installed power flexibility capacity in 2040

What is LDES?

LDES are a host of different technologies that store and release energy through mechanical, thermal, electrochemical, or chemical means.

LDES technologies can play a critical role in delivering flexibility on timescales ranging from hours to weeks.



Who are we?¹

The LDES Council is a global, CEO-led organization that strives to accelerate decarbonization of the energy system at lowest cost to society by driving innovation, commercialization and deployment of long duration energy storage.

The LDES Council provides fact-based guidance and information to governments, industry and broader society, drawing from the experience of its members, which include leading energy companies, technology providers, investors and end-users.

Technology providers



Anchors

Industry and services customers

RioTinto

Capital providers

Breakthrough Energy

Low-carbon energy system integrators & developers

bp
Greenko

Equipment manufacturers

ALTA
SIEMENS ENERGY
Baker Hughes

¹ Findings from the Council's inaugural report *Net zero power: long duration energy storage for a renewable grid* (published in November 2021)

² This reflects membership as of November 23rd 2021

What does the Council do?



- Actionable insights - develop perspectives on e.g., technologies and cost trajectories
- Respected fact-base – provide independent and industry-informed benchmarks
- Proactive communication – catalyze active discussions with external stakeholders
- Amplified voice – elevate LDES vision through coordinated action between members and societal stakeholders
- Community building – convene stakeholders across the value chain with diverse perspectives on sector priorities
- Tackling the hardest problems together – ideate collaborative solutions to sectoral issues

Research focus areas in 2022



Sector coupling
(heat/hydrogen/power)



Regulatory/
Policy Toolbox



Net-Zero
Mining



Net-Zero
Islands

How to engage with the Council

Explore becoming a member

Reach out to the LDES Council:
info@ldescouncil.com

Download the full report



Net-zero power

Long duration energy storage
for a renewable grid

www.ldescouncil.com

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