

I&R - The Global Utility Scale Electricity Storage Market Report 2018

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Abstracts

The world is generating and using more renewable electricity than ever before, but in many cases it is being generated by intermittent – weather dependent – sources like solar and wind. While these are imperative to a decarbonized future, they can't generate power all the time, and this can cause gaps in electricity supply. One possible solution is storage. However, the problem is the technology capable of storing electricity is still at its infancy in many cases. This report looks at the three technologies that have reached utility-scale use, this includes, pumped hydro storage (PHS), compressed air energy storage (CAES) and grid-scale batteries.

While pumped-hydro systems still dominate electricity storage, battery systems for stationary applications have started growing rapidly. Wider deployment and the commercialization of new battery storage technologies has also led to rapid cost reductions. CAES applications remains limited to just a few installations mainly due to siting difficulties, but technological advancements in this segments could see it becoming more widespread.

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Contents

- Executive Summary
- Benefits of the Report
- Intended Audience
- Report Contributors
- Methodology
- Introduction to Utility-Scale Electricity Storage Technologies
 - Table 1: UES Technologies Reviewed (MW)
- What Are Utility-Scale Electricity Storage Technologies?
- Brief History
- Overall Challenges For The EES Industry
- Challenges For Implementing Large Scale EES
- Costs And Economic Viability
 - Table 2: Summary Of The Main Mechanical & Electrical Energy Storage Systems, (MW, \$/KWH, MWH)
- Benefits of Utility-Scale Electricity Storage Technologies
 - Grid Benefits
 - Figure 1: Stylized Representation Of A Daily Load Curve
 - Offset Of Needed Peaking Power Generation Capacity
 - Offset of needed renewable generation capacity
 - Economic Benefits
 - Renewable Energy Dispatch and Timing Benefits (Ability to Meet Renewable Energy Targets, Etc.)
 - Figure 2: Example Of Offset Renewable Generation: Wind Generation Profile For California (Mw)
- Drawbacks of Utility-Scale Electricity Storage Technologies
 - Physical Constraints And Land Requirements
 - Water Use
 - Environmental Concerns
 - Energy Loss During Storage
 - Economic Risk
- Description of Utility-Scale Electricity Storage Technologies and System Components
 - Pumped Hydro Storage
 - Figure 3: Salina (Oklahoma) Pumped Storage Project
 - Figure 4: PHS System Utilizes Seawater, Okinawa, Japan
 - Figure 5: Excavated PHS Concept
 - Figure 6: Cross Section Of A Reversible Pump Turbine
 - Figure 7: Reversible Pump Turbine During Assembly

Figure 8: Generator For A Reversible Pump Turbine
Gravity Power Module Pumped Hydro Storage
Figure 9: Cross Section Of Gravity Power Module (GPM) System
Compressed Air Energy Storage
Figure 10: Huntorf CAES
Figure 11: McIntosh CAES
Figure 12: Schematic Representation Of A CAES System
Figure 13: Axial Air Compressor (Left) And Radial Air Compressor (Right)
Figure 14: Air Expander
Figure 15: Standard Gas Turbine With Compressor Section
Figure 16: McIntosh Gas Turbine (Bottom), Generator (Top), And Exhaust (Right)
Utility Applications
Table 3: Utility Applications Of PHS, CAES & BES
Emerging Utility-Scale Electricity Storage Technologies
Figure 17: Comparison of PHS, CAES, BES, And Emerging Technologies
Overview of Small-Scale and Emerging Technologies
Figure 18: Maturity Stage Of Energy Storage Systems
CAES Heat Storage and Advanced Adiabatic CAES
Flow Batteries
Figure 19: Flow Battery System
Lead-Acid Batteries
Lithium-Ion Batteries
Sodium-Sulphur Battery Systems
Vanadium Redox Battery Systems
Zinc-Bromine Battery Systems
Ultracapacitors
Flywheels
Review of Relevant Emerging Technologies And Potential For Market Readiness
Figure 20: Comparison Of PHS, CAES, And Emerging Technologies
Utility-Scale Electricity Storage Industry Structure
Industry Organization
Figure 21: Industry Structure For Procurement/Installation Of PHS And CAES
Technologies
Utility-Scale Electricity Storage Developers
Engineering and Project Management Contractors
Component Manufacturers and Fabricators
Construction and Procurement Contractors
Raw Materials Producers
Global Utility Scale Electricity Storage Technologies Market Forecast

Table 4: Global Utility Scale Electricity Storage Technologies Market Forecast, 2017-2028, (\$mn, AGR %)

Figure 22: Global Utility Scale Electricity Storage Technologies Market Forecast, 2017-2028, (\$mn, AGR %)

Figure 23: Global Utility Scale Electricity Storage Technologies Market Share 2018 (Inner) vs. 2028 (Outer), (%)

Utility Scale Electricity Storage Pumped Hydro Storage Sub-Market Forecast

Table 5: Utility Scale Electricity Storage Pumped Hydro Storage Sub-Market Forecast, 2017-2018, (\$mn, AGR %)

Figure 24: Utility Scale Electricity Storage Pumped Hydro Storage Sub-Market Forecast, 2017-2018, (\$mn, AGR %)

Table 6: Global Pumped Hydro Storage Market Drivers and Restraints

PHS Appurtenances Sub-Market

PHS Power Train Sub-Market

Utility Scale Electricity Storage Grid-Scale Battery Energy Storage Sub-Market Forecast

Table 7: Utility Scale Electricity Storage Grid-Scale Battery Energy Storage Sub-Market Forecast, 2017-2018, (\$mn, AGR %)

Figure 25: Utility Scale Electricity Storage Grid-Scale Battery Energy Storage Sub-Market Forecast, 2017-2018, (\$mn, AGR %)

Lithium-Ion Grid Battery Energy Storage Sub-Market

Figure 26: Global Lithium-Ion Grid Battery Energy Storage Capacity Additions Forecast 2017-2028 (MW)

Lead-Acid Grid Battery Energy Storage Sub-Market

Figure 27: Lead Battery Grid Energy Storage Technologies Capacity Additions Forecast 2017-2028 (MW)

Flow Batteries Grid Battery Energy Storage Sub-Market

Figure 28: Flow Batteries Grid Battery Energy Storage Technologies Capacity Additions Forecast 2017-2028 (MW)

Sodium-Based Grid Battery Energy Storage Sub-Market

Figure 29: Global Grid Battery Energy Storage Technologies Capacity Additions Forecast 2017-2028 (MW)

Other Grid Battery Energy Storage Sub-Market

Figure 30: Global Grid Battery Energy Storage Technologies Capacity Additions Forecast 2017-2028 (MW)

Utility Scale Electricity Storage Compressed Air Energy Storage Sub-Market Forecast

Table 8: Global Utility Scale Electricity Storage Compressed Air Energy Storage Sub-Market Forecast, 2017-2028, (\$mn, AGR %)

Figure 31: Global Utility Scale Electricity Storage Compressed Air Energy Storage Sub-Market Forecast, 2017-2028, (\$mn, AGR %)

CAES Expansion/ Generation

CAES Storage Vessel

Drivers & Restraints Utility Scale Electricity Storage Technologies Market

Drivers

Rising Energy Prices Indirectly Incentivise Grid Scale Battery Storage

Figure 32: U.S Residential Retail Electricity Price, 1960-2014 (USc/kW)

Investments in Research, Development and Demonstration Projects

Importance of Renewable Energy Integration

Smart Grids and Distributed Power Generation Systems

How Expanding Electricity Demand Can Drive Demand of Grid Scale Battery Storage

The Developing Electric Vehicle Market as a Growth Factor

The Role of Changing National Policies Towards Energy Storage

The Potential of Deregulating the Electric Utility Markets

Grid benefits

Figure 33: Stylized Representation of a Daily Load Curve

Offset of Needed Peaking Power Generation Capacity

Offset of Needed Renewable Generation Capacity

Economic Benefits

Renewable Energy Dispatch and Timing Benefits (ability to meet Renewable Energy targets, etc.)

Restraints of the Grid Battery Energy Storage Technologies Market

The Long-Standing Constraint of High Capital Costs of Grid Scale Battery Storage

The Policy and Regulatory Challenges Ahead

How Conservatism in the Utility Industry May Hinder Growth

The Need for Large-Scale Demonstration Projects

Competition From Other Energy Storage Technologies in the Market

Environmental Concerns

Energy Loss During Storage

Economic Risk

Regional Utility Scale Electricity Storage Technologies Market Forecast

Table 9: Regional Utility Scale Electricity Storage Technologies Market Forecast
2017-2028, (\$mn, AGR %)

Figure 34: Regional Utility Scale Electricity Storage Technologies Market Forecast
2017-2028, (\$mn, AGR %)

Figure 35: Regional Utility Scale Electricity Storage Technologies Market Share 2018
(inner), 2028 (outer), (%)

UES Market Prerequisites

European Utility Scale Electricity Storage Technologies Market Forecast

Table 10: European Utility Scale Electricity Storage Technologies Market Forecast,

2017-2028, (\$mn, AGR %)

Figure 36: European Utility Scale Electricity Storage Technologies Market Forecast, 2017-2028, (\$mn, AGR %)

Figure 37: PHS Installations In European Countries, Total Installed Capacity (MW) And Percentage Of Total Generation Capacity As PHS

Major Industry Players

Table 11: Major European UES Component Manufacturers And Engineers

Major European UES Industry Facets

Table 12: Major Historic UES Projects in Europe (MW)

Table 13: Announced European PHS Projects (MW)

Figure 38: Announced European PHS Capacity, by Country (MW)

Figure 39: European PHS Electricity generation, by Country (TWh)

Table 14: European CAES Announced CAES Projects since 2015 (MW)

Drivers for the European UES Market

Figure 40: Co-Occurrence of Wind Resources and Geologic Formations Suitable to CAES

European Market Growth Potential

Asia-Pacific Utility Scale Electricity Storage Technologies Market Forecast

Table 15: Asia-Pacific Utility Scale Electricity Storage Technologies Market Forecast 2017-2028, (\$mn, AGR %)

Figure 41: Asia-Pacific Utility Scale Electricity Storage Technologies Market Forecast 2017-2028, (\$mn, AGR %)

Major Industry Players

Table 16: Major Asian UES Component Manufacturers And Engineers

Major Asia-Pacific UES Industry Facets

Table 17: Major Historic UES Projects in Asia and Australia (MW)

Table 18: Announced Asia-Pacific PHS Projects (MW)

Drivers for the Asia-Pacific Market

Figure 42: Occurrence of Salt Formations Suitable to CAES

Asia-Pacific Market Growth Potential

Table 19: North American Utility Scale Electricity Storage Technologies Market Forecast 2017-2028, (\$mn, AGR %)

North American Utility Scale Electricity Storage Technologies Market Forecast

Figure 43: North American Utility Scale Electricity Storage Technologies Market Forecast 2017-2028, (\$mn, AGR %)

Figure 44: US UES Storage Technologies In Use By Market Share (GW)

Major Industry Players

Table 20: Major North American UES Component Manufacturers And Engineers

Major North American UES Industry Facets

Table 21: Major Historic UES Projects in North America, (MW)

Figure 45: U.S Pumped Hydro Storage Capacity Location, (MW)

Figure 46: U.S Potential New Pumped Storage Plant Sites At Greenfield Hydroelectric Plant Sites. (MW)

Table 22: Federal Energy Regulatory Commission PHS Permitting Activity AS of October 2016, (MW)

Figure 47: Issued Preliminary Permits For Pumped Storage Projects Map

Figure 48: Locations of Select Proposed PHS Projects

Table 23: North American CAES Proposed CAES Projects since 2017,(MW)

Drivers for the North American Market

Figure 49: Co-Occurrence of Wind Resources and Geologic Formations Suitable to CAES

North American Market Growth Potential

Rest of the World Utility Scale Electricity Storage Technologies Market Forecast

Table 24: Rest of the World Utility Scale Electricity Storage Technologies Market Forecast, 2017-2028, (\$mn, AGR %)

Figure 50: Rest of the World Utility Scale Electricity Storage Technologies Market Forecast, 2017-2028, (\$mn, AGR %)

Major Industry Players

Major RoW UES Industry Facets

Table 25: Major Historic UES Projects in Latin America & Africa, (MW)

Table 26: Announced Rest of the world PHS Projects, (MW)

Drivers for the Rest of the UES World Market

Utility Scale Storage Technologies Market Regulations

United States Regulatory Support and Incentives

Federal

Table 27: Renewable Electricity Production Tax Credit: In-service deadline 2014 (¢/kWh)

Figure 51: impact of production tax credit expiration and extension on U.S. annual installed wind capacity

International Regulatory Support and Incentives: Europe

Table 28: Energy Research Under FP7

International Regulatory Support and Incentives: Asia-Pacific

Industry Trends and Developments

Pumped Hydro Developments

350-MW Abdelmoumen Pumped Storage in Morocco

Hatta Hydroelectric Project

Israel Hydro Pumped Storage

Snowy Mountains Pumped Storage Upgrade

Grid-Scale Battery Developments
AES and Siemens form Fluence Partnership
New York Investing in Energy Storage
Battery Storage Firm Secures Funding
NEC announces 50MW Energy Storage Projects
PSE&G Commissions Battery System For Microgrid Project
Eelpower Commissions Battery Storage System
India's First Grid-Scale Battery Project
Company Profiles
Pumped Hydro Storage Products and Systems Turbines
ABB, Ltd.
Alstom Hydro S.L
Andritz Hydro GmbH
Ansaldo Energia
B. Maier Wasserkraft GmbH Anlagenbau
Bharat Heavy Electricals, Ltd
Chongqing Lisong Electromechanical Equipment Co., Ltd
Dongfang Electric Co., Ltd
Ebara Corp
Gilbert Gilkes & Gordon, Ltd.
Global Hydro Energy GmbH
Gravity Power LLC
Gugler Water Turbines GmbH
Harbin Electric Machinery Co., Ltd
Hitachi, Ltd. Power Systems Co
Hunan Lingling Hengyuan Generating Equipment Co., Ltd
HydroWorks Limited
Hyundai Ideal Electric Co
IMPISA International, Inc.
Ingeteam Energy, SA
JSC Turbo Engineering-Ruselprom
Kirloskar Brothers, Ltd
Litostroj Power d.o.o.
MarelliMotori
Mavel a.s.
Meidensha Corp
Mitsubishi Heavy Industries, Ltd.
OJSC Power Machines
OJSC Turboatom

Orengine International, Ltd
Ossberger GmbH + Co
Parsons Peebles Generation, Ltd.
Pentair Inc
Rainpower Norway AS
Reivax Automação e Controle S/A
Sicmemotori SpA
SPP Pumps
STE Energy
Sundyne Corp.
TES Vsetin A.S.
Toshiba Hydro Power
UCM Resita Turbines
VAPTECH
Voith Hydro GmbH + Co. KG
Wasserkraft Volk AG
Weir American Hydro
CAES Storage Companies
Key Vendors
Dresser-Rand Group
General Compression
Hydrostor
LightSail Energy
SustainX
Other Prominent CAES Companies
Apex CAES
Bright Energy Storage Technologies
Gaelectric
Pacific Gas and Electric Company
Significant Component Providers
AES Energy Storage LLC
ALMiG Kompressoren GmbH
Alstom Power
Ambri Inc
American Vanadium Corp
Ansaldo Energia
American Precision Industries (API)
Atlas Copco Gas & Process GMBH
Bauer Kompressoren GMBH

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Elliott CO
GE Energy
MAN Diesel & Turbo SE
Maxwell Technologies, Inc
Parker Hannifin
R&D Dynamics Corp.
Siemens Energy
Solar Turbines, Inc.
SSS Gears
Struthers Wells
Grid-Scale Battery Storage Companies
Leading Venders Grid Scale Battery Storage Companies
BYD Co. Ltd
GE Energy Storage
NGK Insulators Ltd.
Samsung SDI Co. Ltd.
Sumitomo Electric Industries, Ltd
Other Leading Manufacturers & Supply Companies in the Grid Scale Battery industry
A123 Energy Solutions LLC
ABB Ltd.
Advanced MicroGrid Solutions, Inc.
Conclusions
Methodology
How We Generate Our Industry Forecasts
Disclaimer
Appendix A
Appendix B

COMPANIES MENTIONED

A123 Energy Solutions LLC
ABB, Ltd.
Advanced MicroGrid Solutions, Inc.
AES Energy Storage LLC
Apex CAES
ALMiG Kompressoren GmbH
Alstom Power

Alstom Hydro S.L
Ambri Inc
American Vanadium Corp
American Precision Industries (API)
Andritz Hydro GmbH
Ansaldo Energia
Atlas Copco Gas & Process GMBH
B. Maier Wasserkraft GmbH Anlagenbau
Bauer Kompressoren GMBH
Bharat Heavy Electricals, Ltd
BTEC Turbines, LP
Brayton Energy, LLC
Bright Energy Storage Technologies
BYD Co. Ltd
Chongqing Lisong Electromechanical Equipment Co., Ltd
Consolidated Edison
Dongfang Electric Co., Ltd
Dresser-Rand Group
Ebara Corp
Elliott CO
Eos Energy Storage
Gaelectric
GE Energy Storage
General Compression
Gilbert Gilkes & Gordon, Ltd.
Global Hydro Energy GmbH
Gravity Power LLC
Gugler Water Turbines GmbH
Harbin Electric Machinery Co., Ltd
Hitachi, Ltd. Power Systems Co 205
Hunan Lingling Hengyuan Generating Equipment Co., Ltd
HydroWorks Limited
Hydrostor
Hyundai Ideal Electric Co
IMPISA International, Inc.
Ingeteam Energy, SA
JSC Turbo Engineering-Ruselprom
Kirloskar Brothers, Ltd
LightSail Energy

Litostroj Power d.o.o.
M+W Group
MAN Diesel & Turbo SE
MarelliMotori
Mavel A.S.
Maxwell Technologies, Inc
Meidensha Corp
Mitsubishi Heavy Industries, Ltd.
NEC Corporation
NGK Insulators Ltd.
OJSC Power Machines
OJSC Turboatom
Orengine International, Ltd
Ossberger GmbH + Co
Pacific Gas and Electric Company
Parker Hannifin
Parsons Peebles Generation, Ltd.
Pentair Inc
R&D Dynamics Corp.
Rainpower Norway AS
Reivax Automação e Controle S/A
Samsung SDI Co. Ltd.
Sicmemotori SpA
Siemens Energy
SPP Pumps
Solar Turbines, Inc.
SSS Gears
STE Energy
Struthers Wells
Sumitomo Electric Industries, Ltd
Sundyne Corp.
SustainX
TES Vsetin A.S.
Toshiba Hydro Power
UCM Resita Turbines
UniEnergy Technologies
VAPTECH
ViZn Energy
VLC Energy

VPI Immingham

Voith Hydro GmbH + Co. KG

Wasserkraft Volk AG

Weir American Hydro

Organizations mentioned

European Association for Storage of Energy (EASE)

Federal Energy Regulatory Commission (FERC)

International Finance Corporation (IFC),

U.S, Department of Energy (DOE)

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