

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 sitting difficulties, but technological advancements in this segments could see it becoming more widespread.

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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
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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
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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
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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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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
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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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