

# Flywheel Energy Storage (FES): Market Research Report

https://marketpublishers.com/r/F2C0A974B0CEN.html

Date: January 2015

Pages: 132

Price: US\$ 4,500.00 (Single User License)

ID: F2C0A974B0CEN

## **Abstracts**

This report analyzes the Global market for Flywheel Energy Storage (FES) in US\$ Thousand by the following Applications Utility Scale, UPS, Transportation, and Others. Annual estimates and forecasts are provided for the period 2013 through 2020. Market data and analytics are derived from primary and secondary research. Company profiles are primarily based on public domain information including company URLs. The report profiles 43 companies including many key and niche players such as -

Active Power Inc.

**AFS Trinity Power** 

Alstom Transport

Amber Kinetics, Inc.

Beacon Power, LLC



## **Contents**

## I. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations
Disclaimers
Data Interpretation & Reporting Level
Quantitative Techniques & Analytics
Product Definitions and Scope of Study

#### II. A GLOBAL MARKET REPORT

#### 1. INDUSTRY OVERVIEW

Compatibility with Smart Grids

Flywheel Energy Storage (FES): Low Cost and Low Maintenance Energy Storage with High Power Density

Despite Myriad Benefits, Few Concerns Continue to Hamper Widespread Adoption

Cost Benefits

Low Maintenance Costs

#### Table 1. Flywheel Energy Storage Compared with Other Energy Storage Technologies

Global Market Outlook
Expanding Application Base Benefit Market Expansion
Competitive Landscape
List of Leading Flywheel Manufacturers Worldwide and Addressable Market/Application
Segment

Leading Flywheel Energy Storage System Manufacturers: Snapshot Profiles Beacon Power Corporation Vycon Energy

Piller

**Active Power** 

#### 2. MARKET TRENDS & DRIVERS

Flywheel Energy Storage Driven by the Steady Evolution of the Smart Grid Standard



**Table 2.** Global Spend on Smart Grid Technologies by Region (2014, 2017 & 2020): Cumulative Spending (in US\$ Billion) for Asia-Pacific (incl. China), Europe, Latin America, and North America (includes corresponding Graph/Chart)

Composite Materials in Flywheels: A Major Advancement Spearheading Growth Flywheel Safety Test: Essential for Testing Failure Mechanisms of Composite Flywheels

Increasing Consumer Awareness Drive Demand for Flywheel UPS
Increasing Focus on Renewable Energy Sources: Opportunities Galore for FES

**Table 3.** Targets for Electricity Production from Renewable Energy Sources Worldwide by Country

**Table 4.** Percentage of Renewable Sources in Electricity Production Worldwide by Country (includes corresponding Graph/Chart)

**Table 5.** Global Investments (US\$ Billion) in Renewable Energy by Source: 2013 (includes corresponding Graph/Chart)

Growing Prominence of Solar Power Bodes Well for FES Systems Adoption

**Table 6.** Global Solar PV Installations by Region (2013): Percentage Share Breakdown of Volume Installations for Americas, Asia (Excluding China), China, Europe, and Rest of World (includes corresponding Graph/Chart)

**Table 7.** International Targets for Solar Photovoltaics for Select Countries

Expanding Wind Power Generation Worldwide Offers Significant Growth Opportunities Leading Wind Power Countries Worldwide (2013): Ranking Based on Key Wind Power Facts

Surging Microgrid Capacity Augurs Well for Market Expansion Increasing Penetration of Electric Cars to Promote FES Market Growth

**Table 8.** World Market for Electric Vehicles (2013): Percentage Breakdown of Unit Sales by Product Type (includes corresponding Graph/Chart)



Favorable Trends in Energy Production and Consumption Strengthens Market Prospects

**Table 9.** Global Electricity Consumption in TWh for Years 2000, 2015 & 2030 (includes corresponding Graph/Chart)

**Table 10.** Global Electricity Production by Country (2013): Percentage Breakdown of Electricity Production Volume for China, United States, India, Russia, Japan, Canada, Germany, Brazil, France, South Korea, and Others (includes corresponding Graph/Chart)

**Table 11.** Global Electricity Consumption by Country (2013): Percentage Breakdown of Electricity Consumption Volume for China, United States, Japan, Russia, India, Germany, Canada, Brazil, South Korea, France, and Others (includes corresponding Graph/Chart)

**Table 12.** Projected Global Demand for Primary Energy (Mtoe) and Electricity (MWh): 2015, 2020, 2025, 2030 & 2035 (includes corresponding Graph/Chart)

**Table 13.** Estimated Global Power Generation Infrastructure Requirement (in US\$ Billion) for China, India, Latin America, and North America over the Period 2010-2030 (includes corresponding Graph/Chart)

The United States: A Leading Flywheel Energy Storage Market Worldwide

**Table 14.** US Recent Past, Current & Future Analysis for Flywheel Energy Storage Analyzed with Annual Utility Scale Installed Capacity in Megawatts for Years 2013 through 2020 (includes corresponding Graph/Chart)

Renewable Energy and Energy Storage to Help Offset Escalating Electricity Cost

**Table 15.** The US Grid Energy Storage Market by Technology (2014): Percentage Share Breakdown of Capacity Installations for Pumped Hydro Storage and Other Technologies (includes corresponding Graph/Chart)

**Table 16.** The US Grid Energy Storage Market by Technology Other than Pumped



Storage (2014): Percentage Share Breakdown of Capacity Installations for CAES, Flywheels, Ice Thermal Storage, Li-ion, NaS Batteries, Ni-Cad Batteries and Others (includes corresponding Graph/Chart)

## 3. ENERGY STORAGE SOLUTIONS: A MACRO PERSPECTIVE

Energy Storage: Vital for the Expansion of Renewable Energy Sources

Major Growth Driving Factors for Energy Storage

Energy Storage Technologies: Classification

Pumped Hydro Storage: Largest Available Energy Storage Capacity for Grid

**Applications** 

**Table 17.** Global Energy Storage Market by Technology (2014): Percentage Share Breakdown of Installed Capacity for Traditional Pumped Storage and Other Technologies (includes corresponding Graph/Chart)

**Table 18.** Global Energy Storage Market by Technology Other than Pumped Storage (2014): Percentage Share Breakdown of Installed Capacity for Capacitor, Compressed Air, Flow Battery, Flywheel, Gravitational Storage, Lead Acid Battery, Li-ion, Molten Salt Energy and Others (includes corresponding Graph/Chart)

**Table 19.** Leading Energy Storage Technology Vendors Worldwide (2013): Percentage Market Share Breakdown Based on Capacity for Allis Chalmers, Alstom, CKD Blankso, Gridflex, Harbin, Hydrodynamics Group, Riverbank Power, Sichuan Dongfeng Electric, Voith and Others (includes corresponding Graph/Chart)

**Table 20.** Energy Storage Technologies: Key Features Comparison for PHS, CAES, Flywheel, NaS Battery, Li-ion Battery, Flow Battery, Supercapacitor, SMES, Molten Salt, Hydrogen, and SNG Technology

Various Energy Storage Technologies: Key Advantages & Disadvantages Key Energy Storage Technologies & Applications for Electrical, Chemical, Electrochemical, Mechanical and Thermal Energy Investment in Energy Storage Projects Witness Steady Growth Worldwide

**Table 21.** Number of Energy Storage Projects by Country: 2014 (includes corresponding Graph/Chart)



Government Intervention Critical to Widespread Adoption of Energy Storage Technologies

Domestic Targets for Greenhouse Gas Emissions of Select Regions/Countries New Projects & Government Mandates

Incentives & Standards: Key to Promoting Energy Storage Technologies

Microgrids to Drive Energy Storage Market in the Future

## Table 22. A Glance at Largest Power Blackouts/ Outages Worldwide

Nanotechnology: The Future of Energy Storage?

Nanotubular Bulk Material with Ultra-Low Density for Energy Storage Applications

Research on for High Durability and Advanced Chemical Compositions

Characteristics of Select Battery Technology Types

#### 4. PRODUCT OVERVIEW

A Prelude

Flywheels: Benefits and Challenges

Operation of Flywheels

Types of Flywheel Energy Storage

**Evolution of Flywheels** 

**Ancient Flywheels** 

Flywheels Developed during Industrial Revolution

Modern Flywheels

Physical Features of Flywheel Energy Storage (FES)

General Features

Geometry

**Energy Density** 

Composite Rotors

Properties of Materials

Energy Storage Efficiency of Flywheels

Components of Flywheel Systems

Flywheel Rotor

Bearings

Motor Generator

**Power Electronics** 

Controls and Instrumentation

Housing



Flywheels and Batteries: A Comparison Flywheel Energy Storage: Key Applications

**UPS Systems** 

**Grid Energy Storage** 

Road Transportation

Railway Locomotives

Railway Electrification

Scientific Labs

Aircraft Launching Systems

G2 Flywheel of NASA

Other Applications

**Amusement Parks** 

Pulse Power

**Motor Sports** 

Toys

**Toggle Action Presses** 

#### 5. RECENT INDUSTRY ACTIVITY

Hybrid flywheel system service facility Established in Europe

Beacon Inks Agreement with Chugach Electric for Installing an Hybrid Battery and Flywheel Energy Storage Project in the State of Alaska

Quantum Creates Alternative Flywheel System Design for Camp Pendleton Microgrid GKN to Acquire Flywheel Energy Storage Business from Williams Hybrid Power Beacons' Hazle Township's Flywheel Energy Storage Systems Manufacturing Plant Commences Full Commercial Operations

Beacon Signs Agreement with ERICA Campus of Hanyang University for Transfer of Korean Core Energy Storage Technology

Vycon to Supply Flywheel Energy Storage Systems to The Benito Juarez International Airport in Mexico

Beacon Partners with TDX to Demonstrate a Flywheel Energy Storage System for Wind Power

Beacon Installs Flywheel Energy Storage Systems at Plant in Pennsylvania Vycon Flywheel Systems Extends Partnership with EasyStreet Online Services

#### 6. FOCUS ON SELECT GLOBAL PLAYERS

Active Power Inc. (US) AFS Trinity Power (US)



Alstom Transport (France)

Amber Kinetics, Inc. (US)

Beacon Power, LLC (US)

Calnetix Technologies, LLC (US)

Centre for Concepts in Mechatronics B. V. (CCM) (The Netherlands)

GKN Hybrid Power (UK)

Kinetic Traction Systems, Inc. (US)

Piller Group GmbH (Germany)

POWERTHRU (US)

STORNETIC GmbH (Germany)

Temporal Power Ltd. (Canada)

## 7. GLOBAL MARKET PERSPECTIVE

A. Volume Analytics

**Table 23.** World Recent Past, Current & Future Analysis for Flywheel Energy Storage by Geographic Region - The US and Rest of World Markets Independently Analyzed with Annual Utility-Scale Installed Capacity in Megawatts for Years 2013 through 2020 (includes corresponding Graph/Chart)

**Table 24.** World 8-Year Perspective for Flywheel Energy Storage by Geographic Region/Country - Percentage Breakdown of Annual Utility-Scale Installed Capacity for The US and Rest of World Markets for Years 2013, 2015 & 2020 (includes corresponding Graph/Chart)

B. Value Analytics

**Table 25.** World Recent Past, Current & Future Analysis for Flywheel Energy Storage by Application - Utility-Scale, UPS, Transportation and Others Markets Independently Analyzed with Annual Spending on Technology in US\$ Thousand for Years 2013 through 2020 (includes corresponding Graph/Chart)

**Table 26.** World 8-Year Perspective for Flywheel Energy Storage by Application - Percentage Breakdown of Dollar Spending for Utility-Scale, UPS, Transportation and Others Markets for Years 2013, 2015 & 2020 (includes corresponding Graph/Chart)



## IV. COMPETITIVE LANDSCAPE

Total Companies Profiled: 43 (including Divisions/Subsidiaries - 44)
The United States (21)
Canada (1)
Japan (1)
Europe (20)
France (3)
Germany (4)
The United Kingdom (6)
Italy (1)
Spain (1)
Rest of Europe (5)
Middle East (1)



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