

Global Thermal Energy Storage Market - Forecasts from 2020 to 2025

<https://marketpublishers.com/r/GEE6E2ED0854EN.html>

Date: January 2021

Pages: 110

Price: US\$ 4,250.00 (Single User License)

ID: GEE6E2ED0854EN

Abstracts

The global thermal energy storage market is evaluated at US\$4.204 billion for the year 2019 growing at a CAGR of 12.38% reaching the market size of US\$8.466 billion by the year 2025.

Thermal energy storage is the technology that is used to store thermal energy by varying the temperature so that it can be used later for different purposes. The market is majorly driven by the fact that with a significant depletion in the availability of fossil resources and also the negative impact of these resources on nature, the demand for renewable and more sustainable resources has increased significantly. Renewable energies such as ocean waves, solar radiation, wind and biogas. Thermal energy storage systems are used majorly in building and industrial processes. A thermal energy storage has ample number of advantages like, increase in overall efficiency and also provides more reliability. A key factor which drives the market is that thermal energy storage also proves to be economically better as it takes lesser amount of investment and incurs lower running costs. Moreover, there has been a significant increase in the demand of thermal energy storage solutions owing to the increased applications like, heating, ventilating and HVACs.

The market is also fuelled by a rapid increase in the governmental relaxations across several countries to use renewable resources for energy. For instance, the government of China gives out '5 year plans' every 5 year. According to the plan of 2007 it is mandatory that the share of renewable energy consumption should reach 10% by 2010 and 15% in 2020. The government of China ensures that the predictions of the five year plans are attained. Similarly, the government of United States have been focussing on shifting towards energy generated through renewable sources. According to a recent policy debate, the government is concerned about the GHG emissions from the power

and the transportation sectors. To fight the increasing concerns, the government of United States passed American Recovery and Reinvestment Act (ARRA) on February 13, 2009. Out of the total funds given to ARRA, US\$43 Billion were dedicated to 'clean energy'. Furthermore, out of this US\$43 Billion, approximately US\$ 2.5 Billion were dedicated towards research and development withing the DOE's Office of Energy Efficiency and Renewable Energy. With such huge investments in the sector, the demand for thermal storage solutions is expected to witness a significant growth in the forecast period.

The advent of COVID-19 had an adverse impact on the market since the pandemic brought the activities in various industries to a standstill including all the oil & gas and renewable energy plants across several countries and slowed the growth of the thermal energy storage market to a significant level in the year 2020. With the industries getting back on the track and recovering after suffering losses due to the pandemic, major activities like production and exploration have resumed. The growth of the thermal energy storage market is expected to show gradual increase initially but is expected to witness rapid growth after the industries resume full-fledged activities in the coming years.

The segmentation of the thermal energy storage market has been done into type, applications, technology and geography. By type, the classification of the market has been done into molten salt, chilled water, heat, ice and others. On the basis of applications, the segmentation of the market has been done into power generation and heating & cooling. By the technology, the market has been segmented as sensible heat storage, latent heat storage, thermochemical heat storage. Furthermore, on the basis of geography, the global market has been distributed as North America, South America, Europe, Middle East and Africa, and the Asia Pacific.

Increasing demand of energy storage owing to the increasing levels of energy generation

The increasing demand of thermal energy storage solutions is majorly due to a significant increase in the solar power generation globally. According to the International Renewable Energy Agency, the rapid increase in the generation of renewable sources of energy can help to reduce the Co2 emissions according to the Paris Climate targets that are to be achieved by 2050. Moreover, according to the data of International Renewable Energy Agency, the generation of electricity through solar resources has increased exponentially over the years with 131,462 GwH in 2013 to 549,833 GwH in 2018. With such an immense rate of solar power generation and increasing number of

plants being operated, the demand for thermal energy storage solutions is expected to witness a rapid rise during the forecast period.

Molten salt storage is expected to have a significant share

The thermal energy storage with molten salt type is expected to have a significant share in the market during the forecast period owing to its economic advantages over its counterparts. The molten salt in storage in concentrated solar power plants is one of the cheapest ways to store thermal energy for long hours. Moreover, the molten salt storage has large scale storage capacity and higher boiling points compared to others. The system also provides with higher volumetric heat capacities due to which the system is preferred by ample customers.

Competitive Insights

The players in the global power rental market are implementing various growth strategies to gain a competitive advantage over their competitors in this market. Major market players in the market have been covered along with their relative competitive strategies and the report also mentions recent deals and investments of different market players over the last few years. The company profiles section details the business overview, financial performance (public companies) for the past few years, key products and services being offered along with the recent deals and investments of these important players in the market.

Segmentation

By Type

Molten salt

Chilled Water

Heat

Ice

Others

By Application

Power Generation

Heating & Cooling

By Technology

Sensible Heat storage

Latent Heat storage

Thermochemical heat storage

By Geography

North America

USA

Canada

Mexico

South America

Brazil

Argentina

Others

Europe

Germany

France

UK

Others

Middle East and Africa

Saudi Arabia

UAE

Others

Asia Pacific

China

India

Japan

South Korea

Note: The report will be delivered in 2-3 business days.

Contents

1. INTRODUCTION

- 1.1. Market Definition
- 1.2. Market Segmentation

2. RESEARCH METHODOLOGY

- 2.1. Research Data
- 2.2. Assumptions

3. EXECUTIVE SUMMARY

- 3.1. Research Highlights

4. MARKET DYNAMICS

- 4.1. Market Drivers
- 4.2. Market Restraints
- 4.3. Porters Five Forces Analysis
 - 4.3.1. Bargaining Power of End-Users
 - 4.3.2. Bargaining Power of Buyers
 - 4.3.3. Threat of New Entrants
 - 4.3.4. Threat of Substitutes
 - 4.3.5. Competitive Rivalry in the Industry
- 4.4. Industry Value Chain Analysis

5. THERMAL ENERGY STORAGE MARKET ANALYSIS, BY TYPE

- 5.1. Introduction
- 5.2. Molten salt
- 5.3. Chilled Water
- 5.4. Heat
- 5.5. Ice
- 5.6. Others

6. THERMAL ENERGY STORAGE MARKET ANALYSIS, BY APPLICATION

- 6.1. Introduction
- 6.2. Power Generation
- 6.3. Heating & Cooling

7. THERMAL ENERGY STORAGE MARKET ANALYSIS, BY TECHNOLOGY

- 7.1. Introduction
- 7.2. Sensible Heat storage
- 7.3. Latent Heat storage
- 7.4. Thermochemical heat storage

8. THERMAL ENERGY STORAGE MARKET ANALYSIS, BY GEOGRAPHY

- 8.1. Introduction
- 8.2. North America
 - 8.2.1. North America Thermal Energy Storage Market, By Type, 2019 to 2025
 - 8.2.2. North America Thermal Energy Storage Market, By Application, 2019 to 2025
 - 8.2.3. North America Thermal Energy Storage Market, By Technology, 2019 to 2025
 - 8.2.4. By Country
 - 8.2.4.1. USA
 - 8.2.4.2. Canada
 - 8.2.4.3. Mexico
- 8.3. South America
 - 8.3.1. South America Thermal Energy Storage Market, By Type, 2019 to 2025
 - 8.3.2. South America Thermal Energy Storage Market, By Application, 2019 to 2025
 - 8.3.3. South America Thermal Energy Storage Market, By Technology, 2019 to 2025
 - 8.3.4. By Country
 - 8.3.4.1. Brazil
 - 8.3.4.2. Argentina
 - 8.3.4.3. Others
- 8.4. Europe
 - 8.4.1. Europe Thermal Energy Storage Market, By Type, 2019 to 2025
 - 8.4.2. Europe Thermal Energy Storage Market, By Application, 2019 to 2025
 - 8.4.3. Europe Thermal Energy Storage Market, By Technology, 2019 to 2025
 - 8.4.4. By Country
 - 8.4.4.1.1. Germany
 - 8.4.4.1.2. France
 - 8.4.4.1.3. UK
 - 8.4.4.1.4. Others

8.5. Middle East and Africa

8.5.1. Middle East and Africa Thermal Energy Storage Market, By Type, 2019 to 2025

8.5.2. Middle East and Africa Thermal Energy Storage Market, By Application, 2019 to 2025

8.5.3. Middle East and Africa Thermal Energy Storage Market, By Technology, 2019 to 2025

8.5.4. By Country

8.5.4.1. Saudi Arabia

8.5.4.2. UAE

8.5.4.3. Others

8.6. Asia Pacific

8.6.1. Asia Pacific Thermal Energy Storage Market, By Type, 2019 to 2025

8.6.2. Asia Pacific Thermal Energy Storage Market, By Application, 2019 to 2025

8.6.3. Asia Pacific Thermal Energy Storage Market, By Technology, 2019 to 2025

8.6.4. By Country

8.6.4.1. China

8.6.4.2. India

8.6.4.3. Japan

8.6.4.4. South Korea

8.6.4.5. Others

9. COMPETITIVE ENVIRONMENT AND ANALYSIS

9.1. Major Players and Strategy Analysis

9.2. Emerging Players and Market Lucrativeness

9.3. Mergers, Acquisitions, Agreements, and Collaborations

9.4. Vendor Competitiveness Matrix

10. COMPANY PROFILES

10.1. BrightSource Energy Inc.

10.2. Aalborg CSP A/S

10.3. Abengoa SA

10.4. Baltimore Aircoil Company

10.5. Burns & McDonnell

10.6. SaltX Technology Holding AB

10.7. Caldwell Energy Company

10.8. Terrafore Technologies LLC

10.9. Trane Technologies plc

10.10. CRISTOPIA Energy Systems

I would like to order

Product name: Global Thermal Energy Storage Market - Forecasts from 2020 to 2025

Product link: <https://marketpublishers.com/r/GEE6E2ED0854EN.html>

Price: US\$ 4,250.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GEE6E2ED0854EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970