

Thermal Energy Storage Market by Technology (Sensible, Latent, Thermochemical), Storage Material (Water, Molten Salts, PCM), Application (Power Generation, District Heating & Cooling, Process Heating & Cooling), End User and Region - Global Forecast to 2025

<https://marketpublishers.com/r/T57CC7BEEFFEN.html>

Date: October 2020

Pages: 212

Price: US\$ 4,950.00 (Single User License)

ID: T57CC7BEEFFEN

Abstracts

The global thermal energy storage market size is projected to grow from an estimated USD 188 million in 2020 to USD 369 million by 2025, at a CAGR of 14.4% from 2020 to 2025. The rising number of CSP projects across globe are driving demand for thermal energy storage. The Middle Eastern & African and American countries, such as the US, Morocco, South Africa, and the UAE, are experiencing an upsurge in the demand for electricity for district heating & cooling, and process heating & cooling applications.

“The latent heat storage segment is expected to be the fastest-growing of the thermal energy storage market, by technology, during the forecast period.”

Latent heat storage has the advantage of storing large amounts of heat with only small temperature changes and, therefore, has a high storage density. Phase change materials work on constant temperature, both while charging and discharging. The use of phase change materials can be found in solar energy storage systems for water heating, greenhouses, space heating and cooling, cooking, and waste heat recovery systems.

“Americas: The fastest market for thermal energy storage.”

Americas is the fastest-growing market for the thermal energy storage market. The

growth of the market in the region is driven by the launch of various CSP projects and propelling demand for thermal energy storage for district heating & cooling applications. The US has been a pioneering market for concentrating solar power technology, with CSP installations since the 1980s. The stellar decline in solar PV prices took the attention away from the CSP industry, although project developments continued. The US is the only significant market in the region, with virtually no action in South America and Canada in the near future. However, Chile has some operational thermal energy projects and leads the market in South America with CSP installations for mining and utility-scale power supply.

Breakdown of Primaries:

In-depth interviews have been conducted with various key industry participants, subject-matter experts, C-level executives of key market players, and industry consultants, among other experts, to obtain and verify critical qualitative and quantitative information, as well as to assess future market prospects. The distribution of primary interviews is as follows:

By Company Type: Tier 1- 65%, Tier 2- 24%, Tier 3- 11%

By Designation: C-Level- 30%, D-Level- 25%, Others- 45%

By Region: Americas- 25%, Europe- 35%, Asia Pacific- 20%, and Middle East & Africa- 20%,

Note: The tier of the companies has been defined based on their total revenue; as of 2017: Tier 1 = >USD 1 billion, Tier 2 = USD 500 million to USD 1 billion, and Tier 3 =

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