



Review Article

Review on large-scale hydrogen storage systems for better sustainability

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Abstract

Continuous population growth and enhanced living standards have caused a significant rise in energy demand worldwide. Because of the intermittent nature of renewables (Solar, Wind, Geothermal, etc.), their integration with large scale hydrogen generation and storage units is required for sustainability. The present work reviews the worldwide developmental status of large-scale hydrogen storage demonstrations using various storage technologies such as compressed, cryogenic, liquid organic hydrogen carrier, and solid-state hydrogen storage. It covers the classification of tank materials with distinguished manufacturers based on