Cutting-edge synergetic compressed-air and hydrogen grid-scale electricity storage solutions

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Through advanced in silico designs of a new energy storage technology, is project aims at optimising its performance, and exploring its value and wider role within the energy system. By recovering and valorising the heat generated during charging of a compressed air electricity storage plant to drive high-efficiency high-temperature water electrolysis, the proposed innovative system allows emission-free and cost-effective inter-seasonal (and beyond) electricity storage, key for a sustainable energy future.