iClima Long Duration Energy Storage Index

WE MUST SOLVE THE PROBLEM OF RENEWABLE ENERGY INTERMITTANCE AS COUNTRIES ACCELERATE THE ENERGY TRANSITION AND GRIDS BECOME PREDOMINANTLY SOLAR AND WIND BASED

WHY LDES?

The current alternatives to energy storage are the use of peak power facilities (that usually run on fossil fuels) or demand response programs that attempt to shift electricity demand to non-peak hours. Clean energy storage allows intermittent energy to be stored for later use when it is needed, as well as offering flexibility benefits to balance constantly changing levels of supply and demand throughout the day.

What are the solutions?

The purpose of the index is to represent utility scale storage solutions beyond four hours in duration, situated 'in front of the meter'

The three main segments are:

STORAGE SOLUTIONS BASED ON BATTERIES

Battery optimization; clean energy storage management; battery recycling; battery storage design and manufacturing.

STORAGE SOLUTIONS BASED ON GREEN HYDROGEN

Design and manufacturing of electrolyzers; design and manufacturing of fuel cells; green hydrogen production.

STORAGE IN OTHER SHAPES AND FORMS

Pumped hydro; compressed air; gravity based solutions.

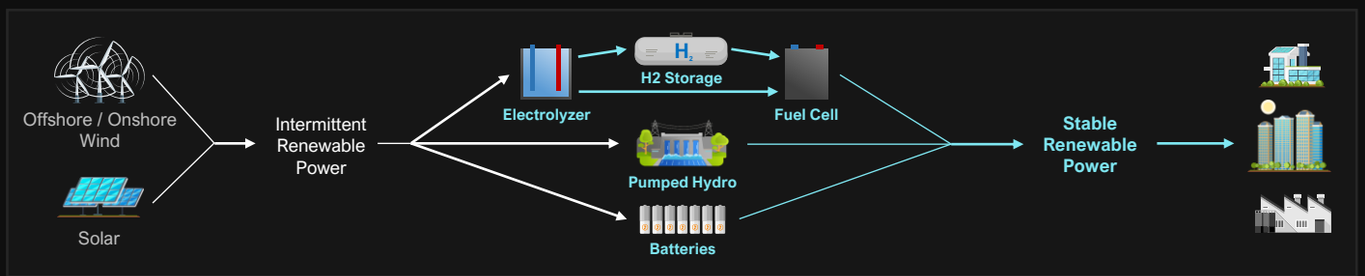
What companies are in LDES that make it so unique?

The Index is not designed to represent the supply chain activities such as minerals, metals and mining, that are required to manufacture batteries, but rather the companies that are designing and selling the final key hardware and software for the application of storage solutions (batteries and beyond).

Clean energy storage is a segment expected to grow over 100x in the next 15 years and there are currently no indices that solely focus on how to solve renewable energy intermittence.

Sample of companies:

ORMAT, LG Energy Solution, SOLID POWER, ITM POWER Energy Storage | Clean Fuel, FIRST HYDROGEN, BYD, Ørsted, ANDRITZ, Bloomenergy, FLUENCE, IBERDROLA, TESLA, Li-Cycle, CATL, ESS INC, stem



The solutions that will enable 100% renewable based grids

Long Duration Energy Storage is the technology that will enable renewable energy to transform our grids. It is a fundamental part of the energy transition and our goal to reach carbon neutrality.

Surplus energy from wind and solar are intermittent in nature. LDES firms renewable electricity and makes it dispatchable. Acceleration of the energy transition, led by Germany and the EU, means the acceleration of the growth of LDES solutions.

Ticker : LDESCLIMA

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