

**Direxion  
Hydrogen ETF  
(HJEN)**

# Direxion Hydrogen ETF (HJEN)

## Plug into Companies Powering the Clean Hydrogen Economy

Hydrogen is one of the most promising sources of clean fuel on the path to net-zero emissions around the world. Hydrogen is the lightest and most abundant element in the universe, and it may be the key to fulfilling the world’s growing energy needs, while fighting climate change.

The Direxion Hydrogen ETF (HJEN) offers exposure to companies leading the way towards net-zero emissions.

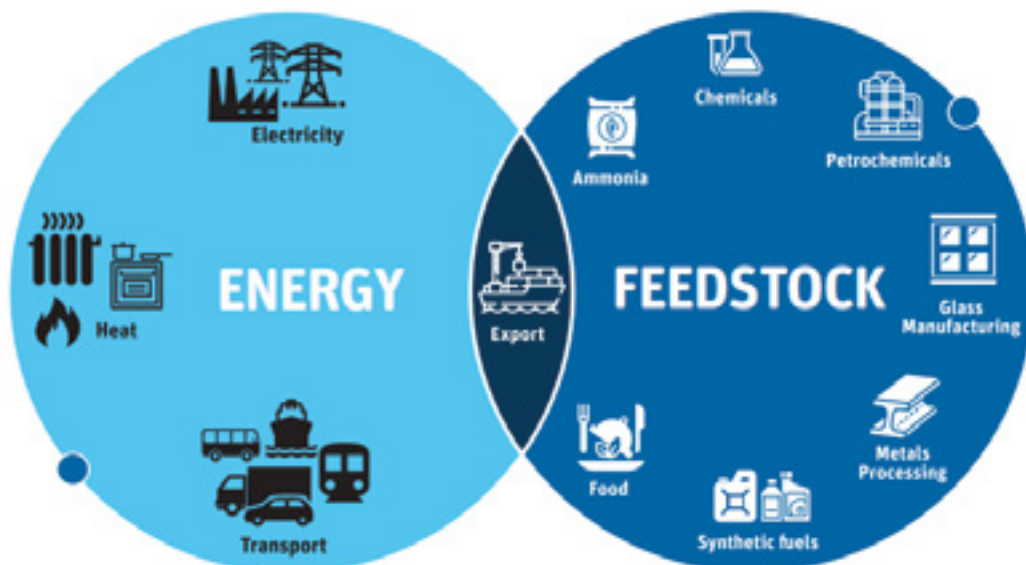
Addressing climate change, by decarbonizing the planet, is one of the key goals countries around the world have set for both the near and long-term. Yet, our collective way of life requires more and more energy to function as we have come accustom, with overall energy demand expected to increase 9% by 2030<sup>1</sup>. 81% of global energy consumption is still derived from fossil fuels<sup>2</sup>. Electrification alone cannot drive global carbon dioxide (CO<sub>2</sub>) emissions down to zero. We require a different solution; one that is more accessible, efficient and sustainable, and driven by clean energies such as hydrogen (H<sub>2</sub>).

Hydrogen has been produced as a renewable, zero-emission fuel and a store of energy since the early 1900s. Once extracted, hydrogen can act as an energy carrier (similar to electricity) that offers high-density energy, containing nearly three times as much energy by weight when compared to natural gas, gasoline and diesel<sup>3</sup>. It is quite versatile, with applications ranging from zero emission fuel and a power source for buildings, to feedstock for industrial processes and products such as plastics. Hydrogen can fuel public transportation fleets and heat our homes in a clean and renewable way, with the potential to generate \$2.5T of direct revenues, and \$11T of indirect infrastructure by 2050<sup>2</sup>

### FUND FACTS

Symbol	HJEN
CUSIP	25460G617
Inception Date	03/25/2021
Rebalance	Quarterly
Benchmark Index	Indxx Hydrogen Economy Index (IH2ECO)

## Hydrogen is a Versatile Source of Clean Energy with Multiple Applications



Source: Australia’s Commonwealth Scientific and Industrial Research Organisation (CSIRO): National Hydrogen Roadmap (2019)

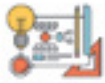
Why is the mainstream potential for hydrogen use finally coming into focus as the world works towards net-zero carbon emissions? Three essential drivers are pushing hydrogen to the center of the conversation:



The cost of production of green hydrogen, the most carbon friendly form of hydrogen, has fallen 50% in the last 5 years, and is expected to fall another 60–90% by the end of the decade<sup>2</sup>. By 2030, hydrogen could be shipped at a cost of \$2-3/kg, which unlocks demand in many key sectors<sup>4</sup>.



The technology involved in hydrogen production, storage, and equipment and components has notably improved over the years. This resulting in better efficiencies and flexibility for important drivers of the hydrogen economy, such as electrolyzers (green hydrogen production) and fuel cells (end-market).



The overall environment and ecosystem of support in hydrogen as a clean energy source is going mainstream. Over 110 countries, representing more than 65% of global CO<sub>2</sub> emissions, have introduced targets to achieve net-zero emissions by 2050<sup>5</sup>, where hydrogen will potentially play a major role. Today, there are over 100 members in the Hydrogen Council, with 228 hydrogen projects<sup>4</sup> announced globally across the entire value chain.

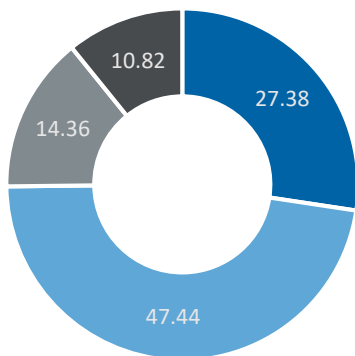
The global shift from regulators, investors, and consumers towards decarbonization presents hydrogen as a focus with immense interest and investment. Hydrogen is gathering strong momentum as a major pillar in the global energy transition, with the momentum is occurring across the entire value chain – from production, to distribution to, end applications.

### Index: Indxx Hydrogen Economy Index

The Indxx Hydrogen Economy Index tracks the performance of 30 companies across the following five hydrogen-related sub-themes:

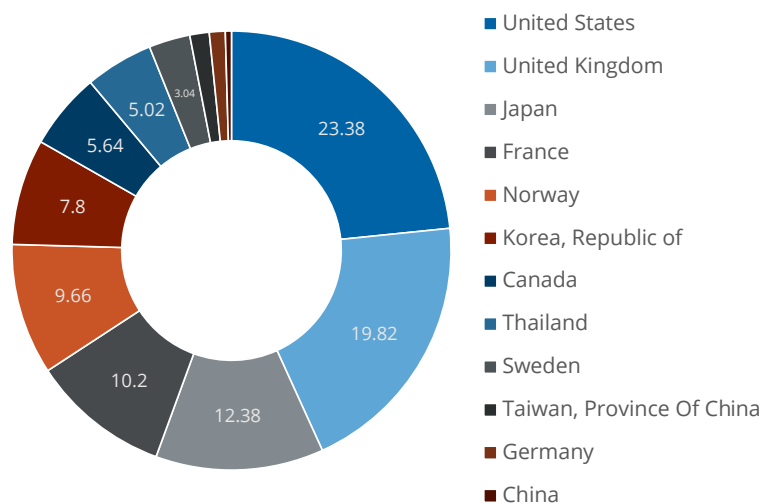
- 1. Hydrogen Production and Generation:** Companies involved in the process of hydrogen generation, in either liquid or solid form.
- 2. Hydrogen Storage and Supply:** Companies engaged in providing storage and transportation services of hydrogen. It also includes companies that supply hydrogen to various users and operate hydrogen fueling stations across countries.
- 3. Fuel Cell and Battery:** Companies manufacturing fuel cells and batteries that are run on hydrogen-based technology.
- 4. Hydrogen Systems and Solutions:** Companies offering equipment, components or technology used in hydrogen industry. Those involved in providing solutions and systems to the value chain across hydrogen generation, storage and supply.
- 5. Membrane and Catalyst:** Companies that design and produce membrane, filters, catalyst or membrane assemblies for fuel cell, or hydrogen-related, technologies.

**Exposure to Hydrogen Value Chain**  
as of 12/31/2022



- Hydrogen Production and Generation
- Fuel Cell and Battery
- Hydrogen Systems and Solutions
- Hydrogen Storage and Supply

**International Geographic Breakdown**  
as of 12/31/2022



Name (Ticker)	Weight (%)
Nel Asa	9.17
Air Liquide	8.67
Bloom Energy Corp	8.40
Ballard Power Systems	5.64
Plug Power	5.50
Doosan Fuel Cell	5.36
Air Products and Chemicals	5.27
PTT Global	5.02
Linde	4.66
BP	4.59

Holdings as of December 31, 2022. Holdings are subject to change and should not be considered investment advice.

**Implementation:** May be considered a satellite holding with exposure to companies at the forefront of the future, hydrogen-based energy markets.

**References:**

- <sup>1</sup>International Energy Agency (October 2020): "World Energy Outlook 2020"
- <sup>2</sup>BofA Global Research (September 2020): "Thematic Investing: The Special 1 – Hydrogen Primer"
- <sup>3</sup>U.S. Department of Energy (2019): "Increase your H2IQ!"
- <sup>4</sup>Hydrogen Council (2021): "Hydrogen Insights"
- <sup>5</sup>UN News (December 2020): "The Race to Zero Emissions, and Why the World Depends on it"

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***An investor should carefully consider a Fund's investment objective, risks, charges, and expenses before investing. The Fund's prospectus and summary prospectus contain this and other information about the Direxion Shares. To obtain the Fund's prospectus and summary prospectus call 866-476-7523 or visit our website at [direxion.com](http://direxion.com). The Fund's prospectus and summary prospectus should be read carefully before investing.***

Indxx is not a sponsor of, or in any way affiliated with, the Direxion Hydrogen ETF. Investments cannot be made in an index.

**Direxion Shares ETF Risks** - Investing involves risk including possible loss of principal. There is no guarantee the investment strategy will be successful. Hydrogen companies may be significantly impacted by obsolescence of existing technology, short product cycles, falling prices and profits, competition from new market entrants and general economic conditions. In addition, intense competition and legislation resulting in more strict government regulations and enforcement policies and specific expenditures for cleanup efforts can affect the industry. Because this is an emerging industry, companies are generally smaller and the share price of hydrogen companies may be more volatile than companies operating in other, more established industries.

Additional risks of the Fund include, but are not limited to, Index Correlation Risk, Index Strategy Risk, and risks associated with the market capitalizations and sectors of the securities in which the Fund may invest. Please see the summary and full prospectuses for a more complete description of these and other risks of the Fund.

**Distributor for Direxion Shares:** Foreside Fund Services, LLC.