



# Euronext NDR Hydrogen World Index

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The objective of the **Euronext NDR Hydrogen** Index is to help investors identify companies which are actively implicated in the hydrogen industry.

Hydrogen, the most abundant chemical substance in the universe, is a gas whose chemical properties are of major energy interest. Hydrogen is considered an “energy carrier” because it offers the possibility of being produced, stored, transported and used. Even though today, hydrogen is almost exclusively used in industry, especially the chemicals industry and refining, it has a lot of benefits. Hydrogen can be used to create energy in the form of electricity when combined with oxygen in a fuel cell for example. We can even see the beginning of a transition towards more sustainable methods of hydrogen production, i.e. low-emission or low-carbon options (often referred to as blue and green hydrogen).

The methodology leverages on an innovative assessment developed by Ned Davis Research, global provider of independent investment research which combines macro, fundamental, sentiment, and technical research disciplines.

**The Euronext NDR Hydrogen Index tracks companies selected based on their involvement in the following activities :**

- Fuel cell manufacturing - companies that create fuel cells or equipment used by fuel cells. Hydrogen fuel cells are electricity generating devices that use hydrogen as the primary input.
- Hydrogen production/distribution/storage - companies that are involved in the creation, storage, sale, and distribution of liquified hydrogen. Hydrogen is gas and storing it in a liquified state requires lowering its temperature to -253 Celsius. It is usually distributed through pipelines, high-pressure tube trailers, or liquified hydrogen tankers
- Hydrogen automotive & equipment - companies that create fuel cell powered engines, equipment related to fuel cell powered engines, or transportation equipment that uses fuel cell powered engines including fork lifts, automobiles, semi-trucks, and buses.





# Building Blocks



## STARTING UNIVERSE

Start from the Euronext World developed Index, all the companies listed on Euronext markets (France, Netherlands, Norway, ...) and the companies listed in the USA



## BASELINE EXCLUSIONS

Exclusion of the constituents with a 3-months Average Daily Traded Volume lower than 2 Million EUR, and of the constituents with a Free Float Market Cap lower than 500 Million EUR



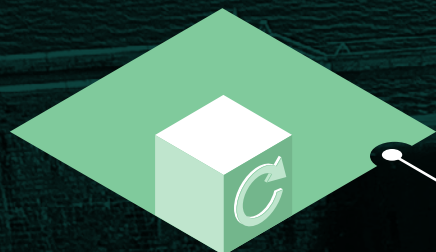
## SELECTION

Selection of the companies involved in a hydrogen-related activity



## WEIGHTING

Free Float market capitalization weighting





# Index Methodology

## Involvement in a Hydrogen-related activity

The selection is computed using Ned Davis Research (NDR) database on hydrogen-related activity.

A company might be related to Hydrogen via:

- Hydrogen production
- Hydrogen distribution
- Hydrogen storage
- Hydrogen automotive
- Hydrogen equipment
- Fuel Cells

Ned Davis Research leverage the expertise of their Thematic Strategists along with cutting-edge Artificial Intelligence/Natural Language Processing (NLP) algorithms to generate Thematic Opportunities Scores that capture how closely a given company aligns to the Hydrogen theme.

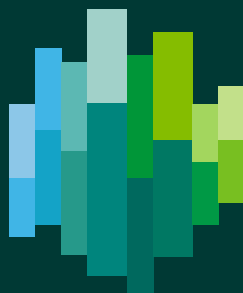
## Thematic Opportunities Scores by Ned Davis Research (NDR)

The Thematic Opportunities Score is calculated using NDR NLP-based algorithm. It scores companies according to how closely their business description aligns with a user-defined target theme. The target theme comprises expert-selected companies, descriptions, or keywords that exemplify the theme.



### REVIEW CYCLE

semi-annually, effective after the market close of the third Friday of June and December



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