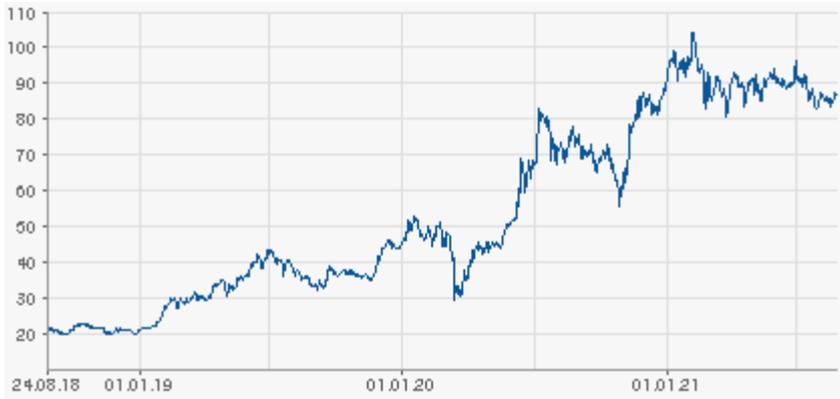


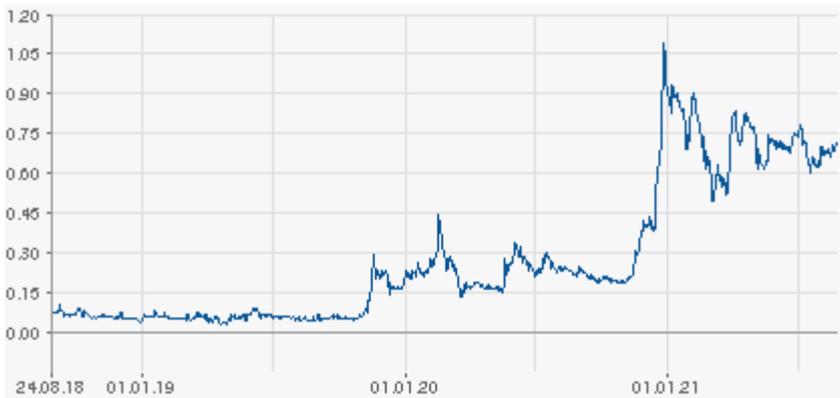
# Hydrogen and Fuel Cell Stocks (26 August 2021)

## 2G Energy AG



EUR 87,10 (+0,46%)

## AFC Energy PLC Shs



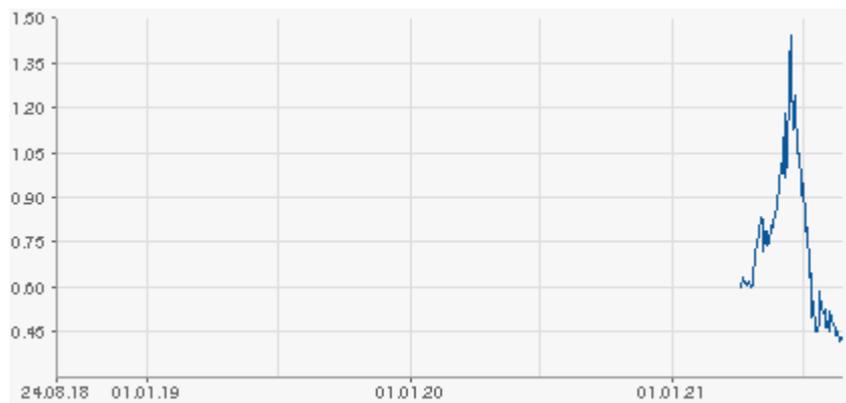
EUR 0,69 (-1,70%)

## Aker Clean Hydrogen Registered Shs



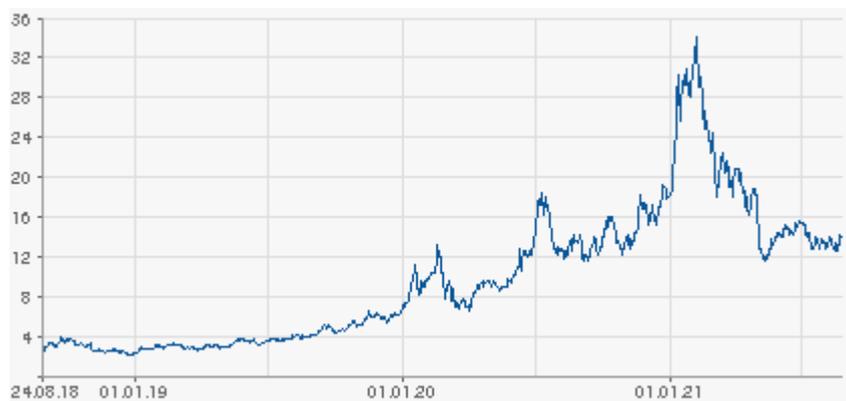
EUR 0,68 (+2,41%)

## AmmPower Corp Registered Shs



EUR 0,45 (+6,64%)

## Ballard Power Inc.



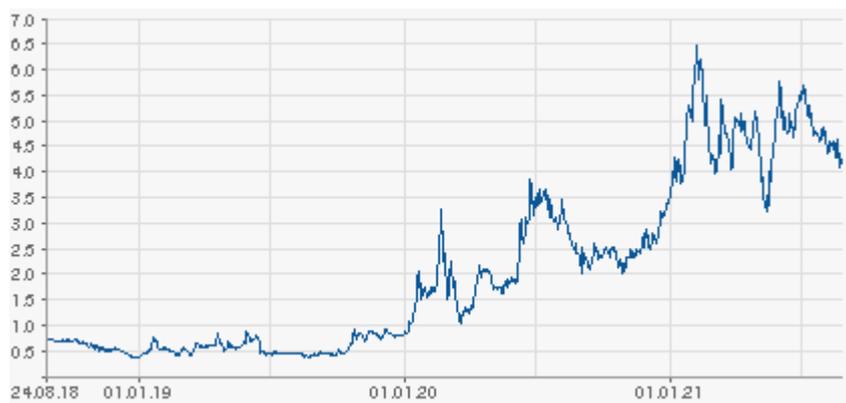
EUR 13,82 (-1,32%)

## Bloom Energy Corp Registered Shs -A-



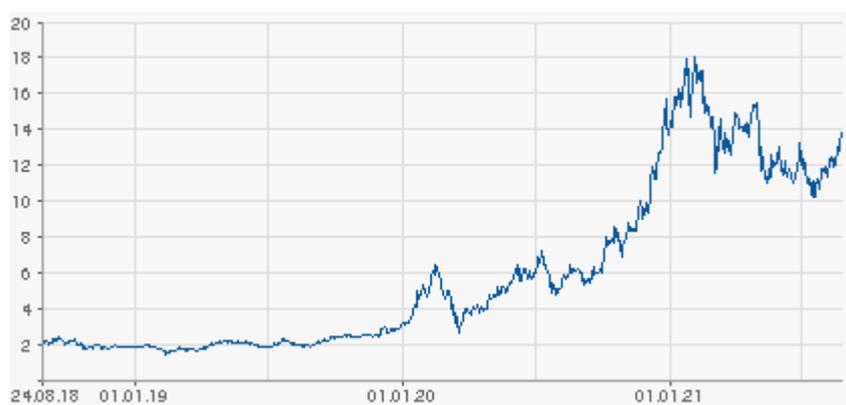
EUR 18,08 (+1,09%)

## Cell Impact AB



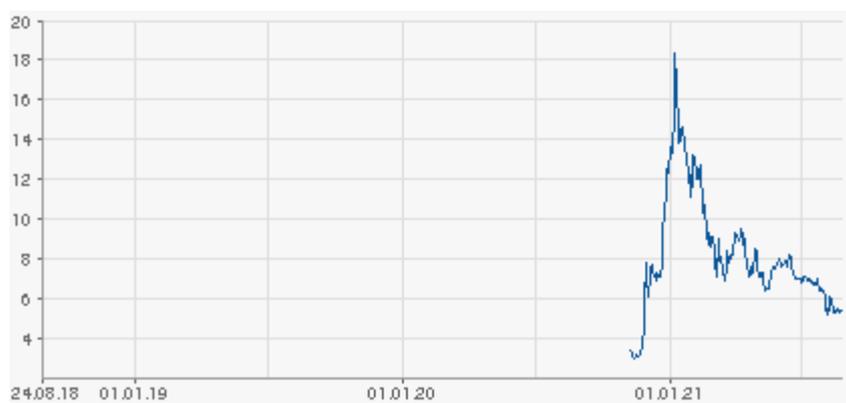
EUR 4,30 (+1,08%)

## Ceres Power Holdings PLC Registered Shs



EUR 13,85 (+0,29%)

## Everfuel A-S Registered Shs



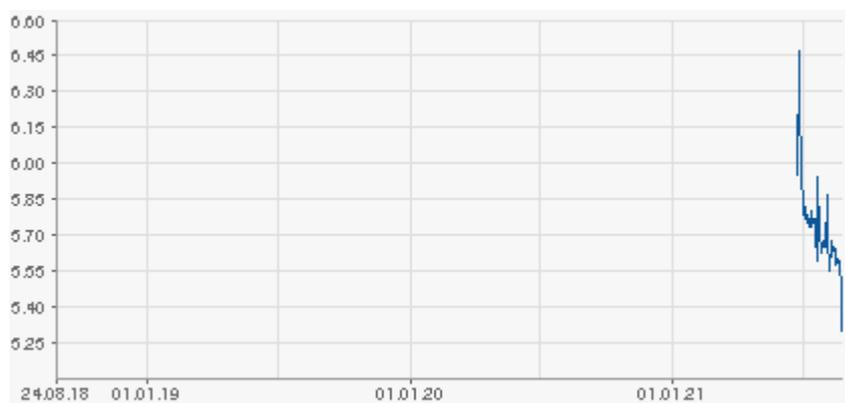
EUR 5,35 (-1,29%)

## FuelCell Energy Inc Registered Shs



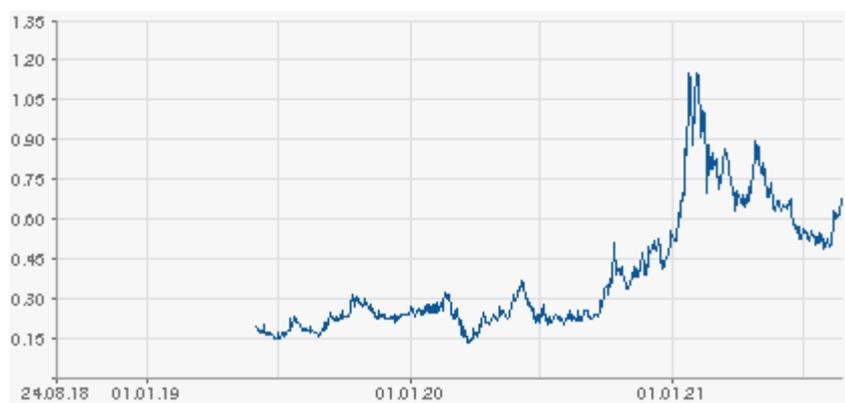
EUR 5,29 (-3,72%)

## Green Hydrogen Systems A-S Bearer and-or registered



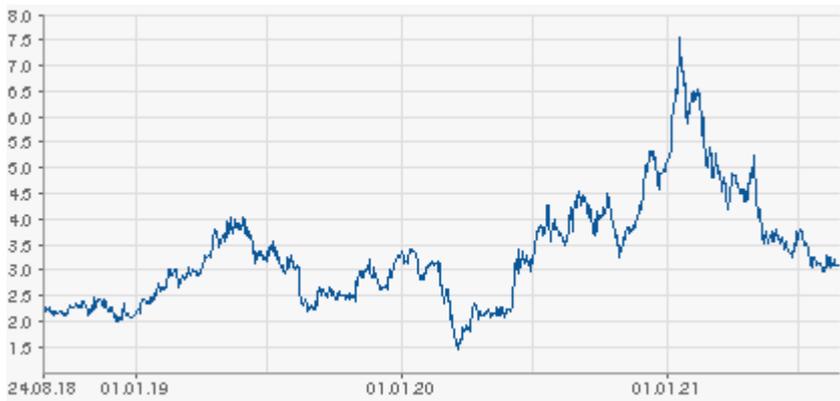
EUR 5,26 (-0,75%)

## Hazer Group Ltd



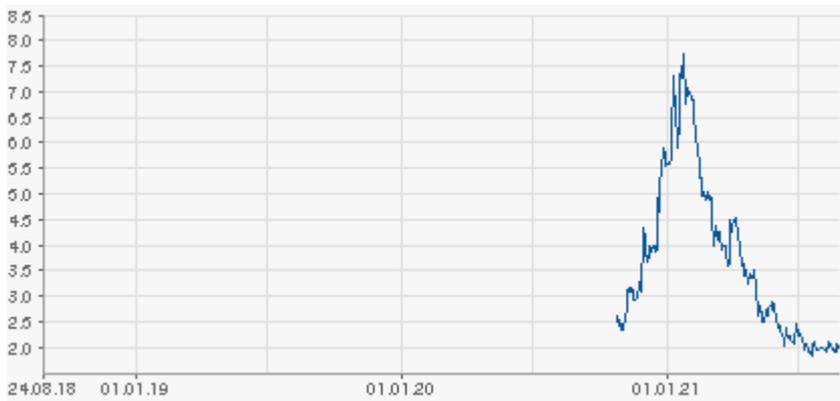
EUR 0,67 (+0,30%)

## Hexagon Composites ASA



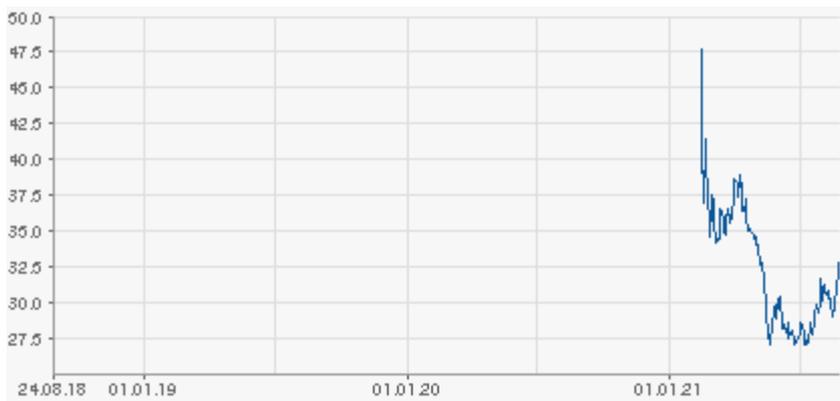
EUR 3,12 (+1,04%)

## Hydrogenpro AS Registered Shs



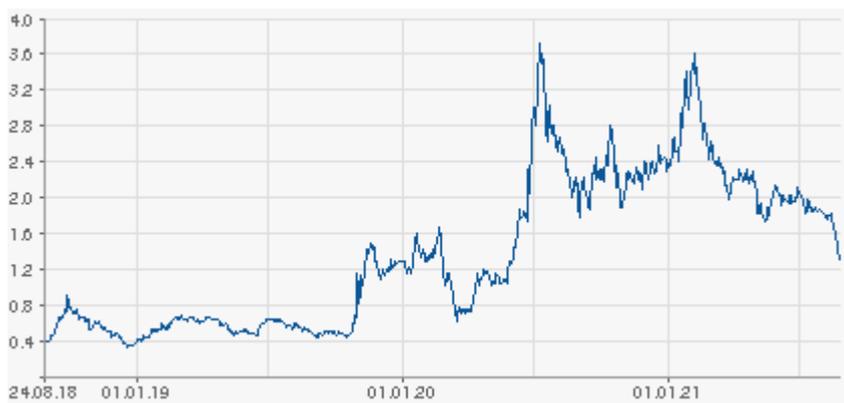
EUR 1,96 (-0,71%)

## Hydrogen-Refueling-Solutions SA



EUR 32,15 (-1,68%)

## Impact Coatings AB



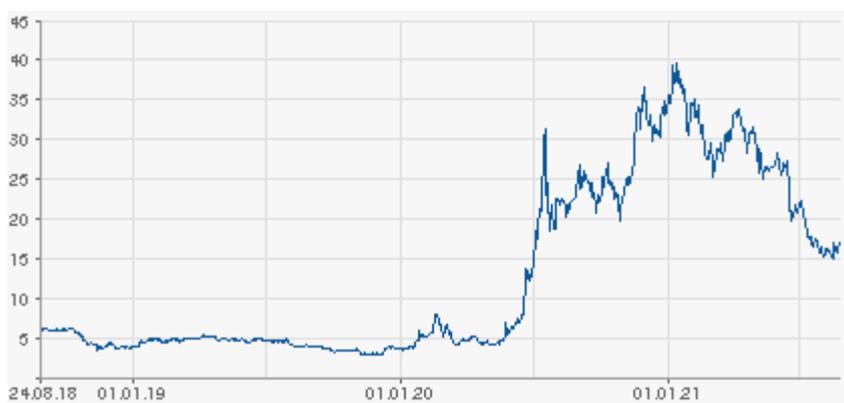
EUR 1,34 (+2,14%)

## ITM Power plc



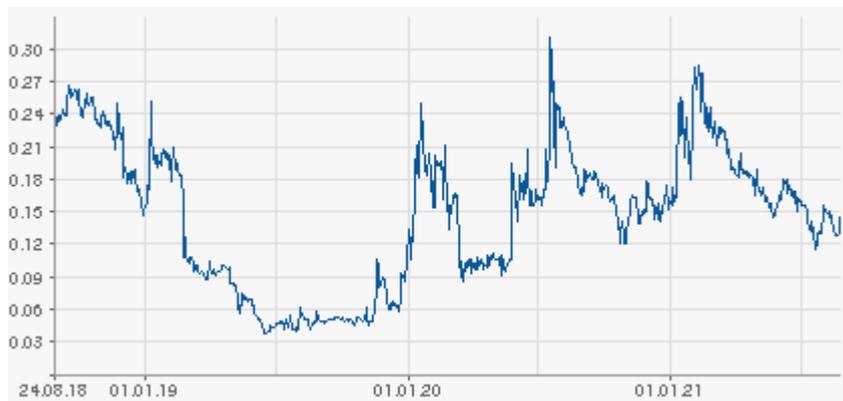
EUR 5,83 (+3,28%)

## McPhy Energy SA



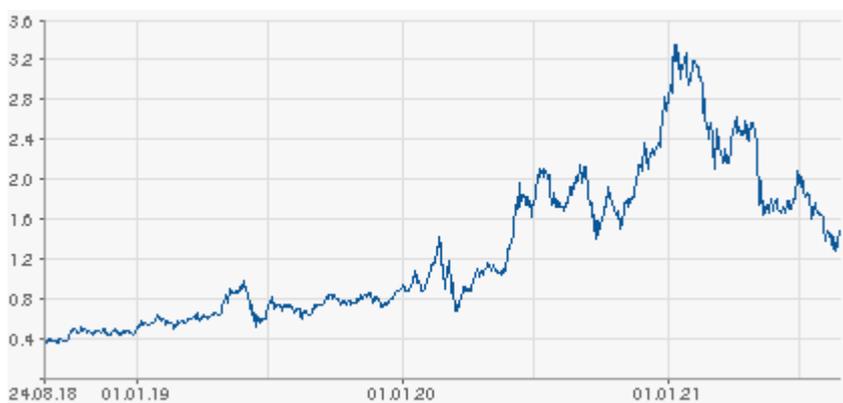
EUR 16,60 (-2,41%)

## myFC Holding AB



EUR 0,14 (-0,69%)

## NEL ASA



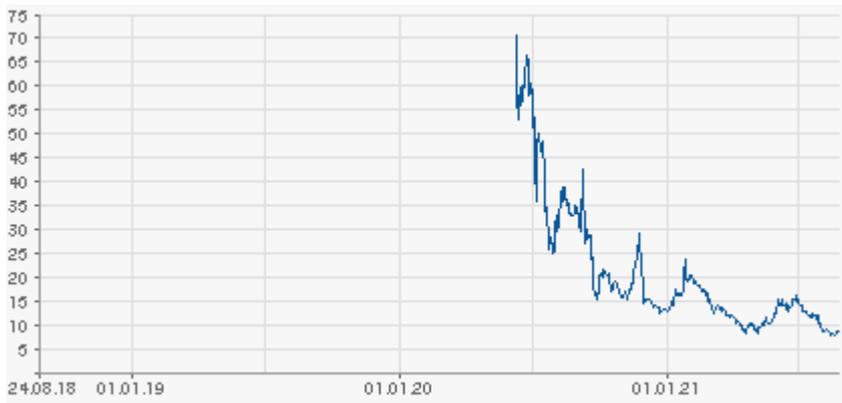
EUR 1,44 (-2,31%)

## NewHydrogen Inc Registered Shs



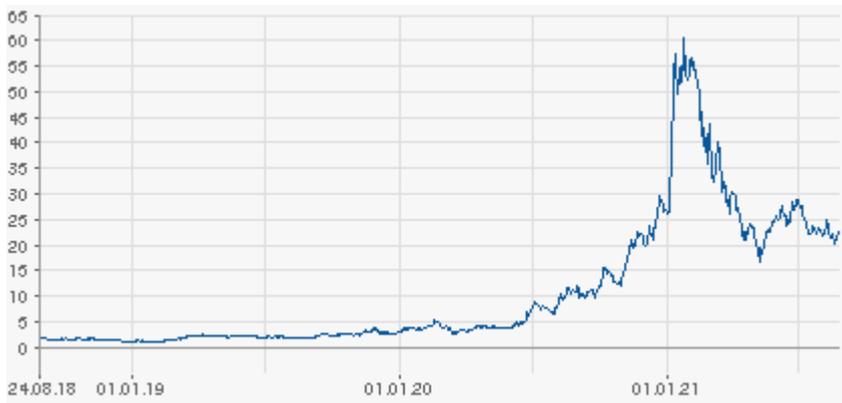
EUR 0,02 (+6,79%)

## Nikola



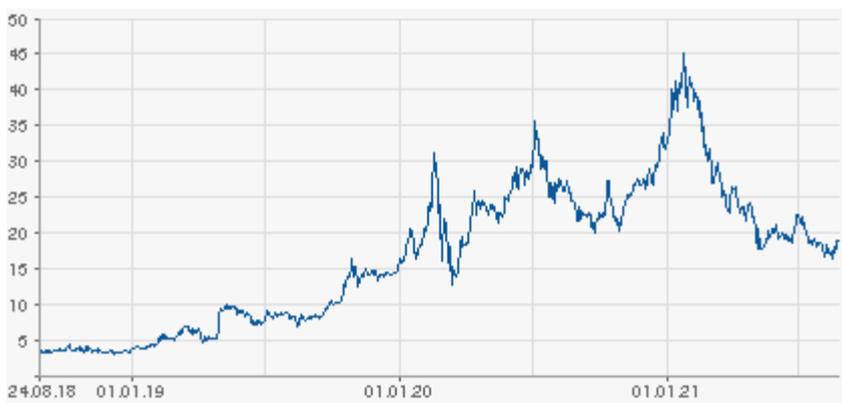
EUR 8,31 (-2,07%)

## Plug Power Inc.



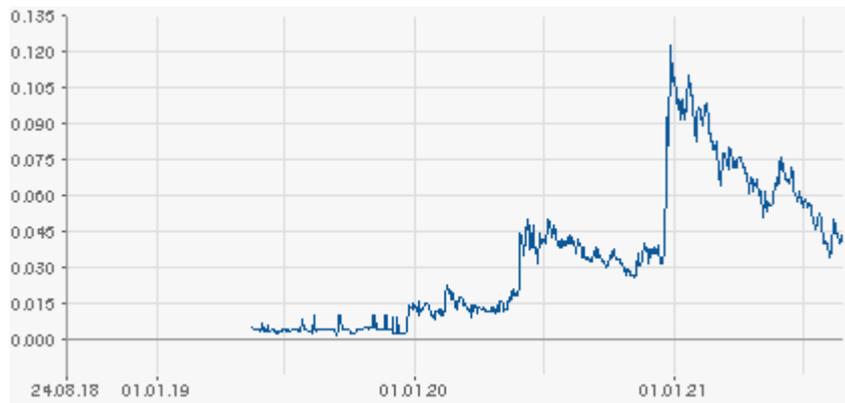
EUR 22,17 (-1,16%)

## PowerCell Sweden AB



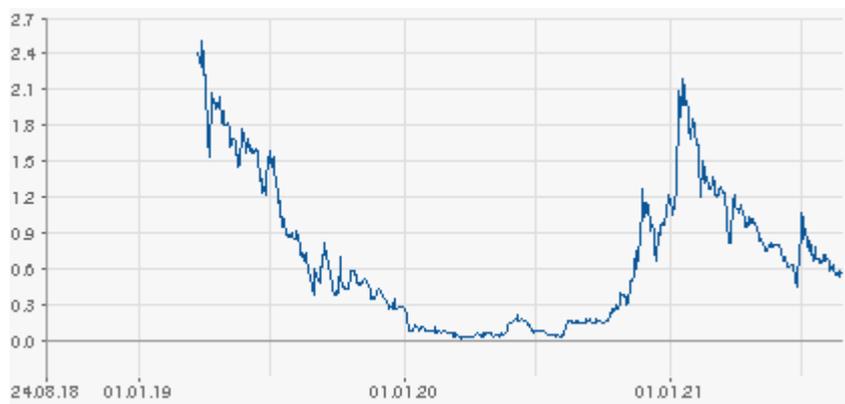
EUR 19,49 (+2,80%)

## Powerhouse Energy Group Plc



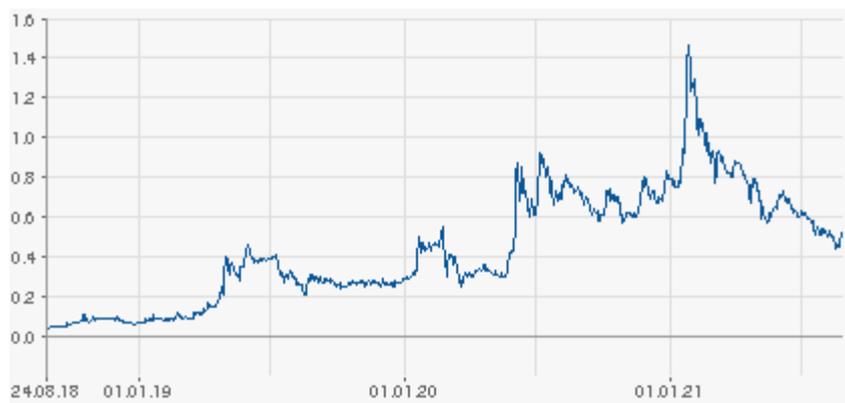
EUR 0,04 (-4,63%)

## PowerTap Hydrogen Capital Corp Registered Shs



EUR 0,57 (-0,53%)

## Proton Power Systems



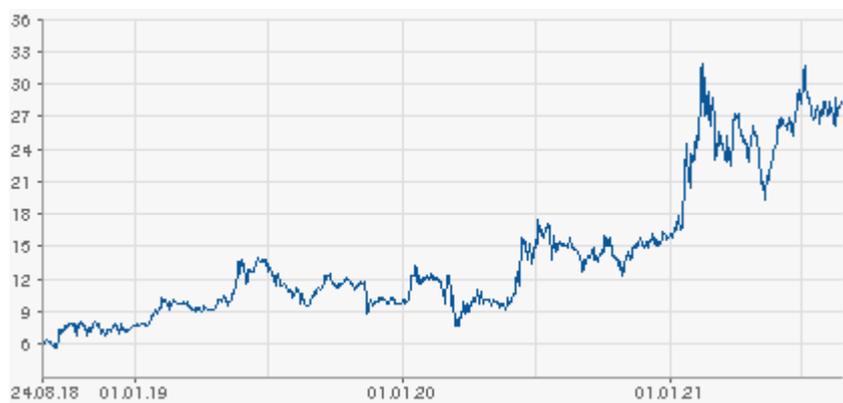
EUR 0,54 (+4,85%)

## Pure Hydrogen Corporation Limited Chess Depository Interests Repr 1 Sh



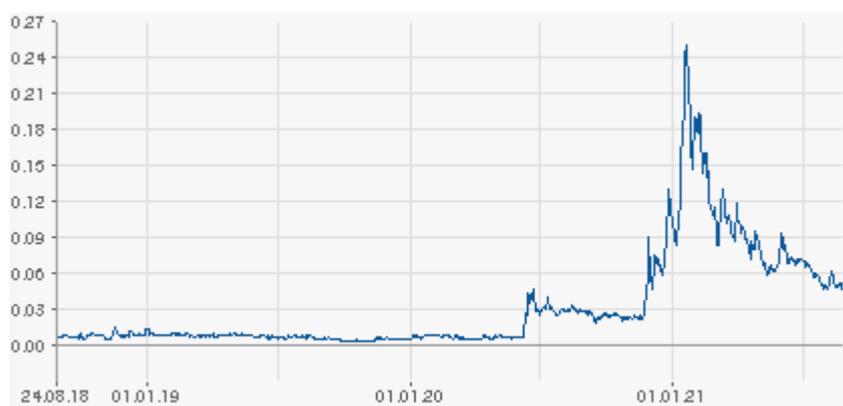
EUR 0,20 ( $\pm 0,00\%$ )

## SFC Energy AG



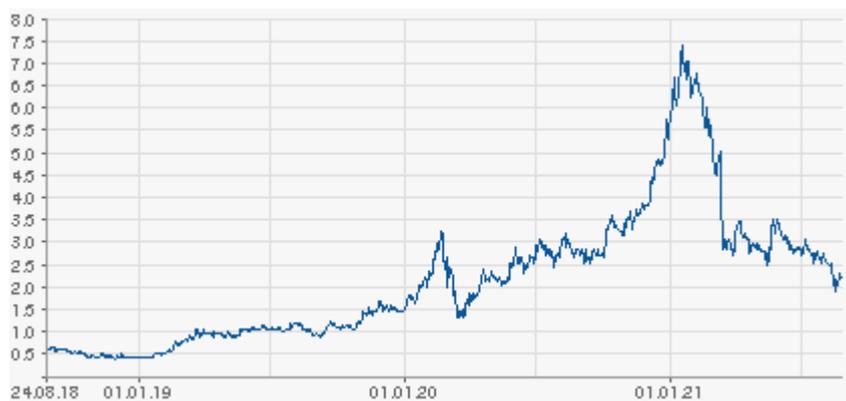
EUR 28,30 ( $-0,18\%$ )

## SunHydrogen Inc



EUR 0,05 ( $+7,81\%$ )

## Xebec Adsorption Inc



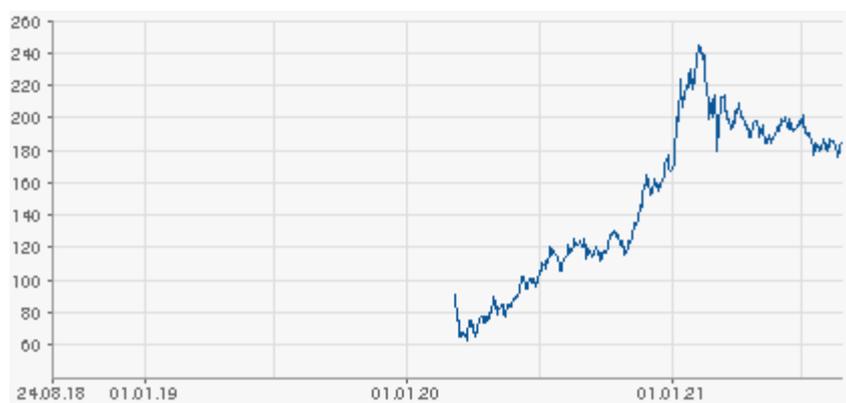
EUR 2,32 (+5,45%)

## Open-End Partizipations-Zertifikat auf Solactive Hydrogen Top



EUR 215,30 (+0,05%)

## Tracker Zertifikat auf Global Hydrogen NR



EUR 183,72 (-0,53)

## Hydrogen and Fuel Cell Investments

In February 2021, the price rally in the hydrogen sector ended abruptly - there was a sharp drop. Since then, the Global Hydrogen Index (Hydrogen Index) has moved sideways. The turbulence of hydrogen stocks seems to be over. New hydrogen projects have been announced. Experts agree: Hydrogen will be the oil of the future. Many countries have taken climate protection measures that include the entry into the hydrogen economy. The German government, for example, wants to invest more in hydrogen.

Water electrolysis is crucial to building an energy system without CO<sub>2</sub> emissions and a green industry. New markets are opening up for numerous companies. This gives further impetus to hydrogen shares. Read more in our SWOT analysis. One of the projects launched by the German government for the long-term energy transition is a new hydrogen strategy. In the opinion of many observers, this is long overdue. Anyone who uses electricity to produce hydrogen has to pay an EEG surcharge, even if only green electricity is used. That's why it hasn't been worthwhile so far to convert surpluses in electricity production into hydrogen. This would largely solve the storage problem.

The FDP had therefore already called for a "coordinated federal-state hydrogen strategy" in January 2020. Electricity produced with hydrogen should be exempt from the EEG levy. In addition, hydrogen is to partially replace the extremely environmentally harmful coking coal in steel production. However, only additional plants with a capacity of five gigawatts are to be built by 2030, and a further five gigawatts by 2035. A lot of money is also to flow into research funding. In total, the German government plans to spend 12.5 billion euros on the hydrogen strategy, 9 billion more than initially planned.

Hydrogen production in significant quantities is still in its infancy in this country. One of the concrete projects is the construction of an electrolyzer at the Wunsiedel Energy Park. Here, green hydrogen in the volume of nine megawatts is to be produced from mid-2022. Around 1,350 metric tons per year are to be produced from green electricity surpluses. Hydrogen shares will not take off until other countries follow Germany's lead. This is by no means out of the question; some countries like Japan are already further along than we are. Currently, the production volume for CO<sub>2</sub>-neutral and CO<sub>2</sub>-free hydrogen worldwide is less than 3 million tons. For 2050, a production volume of more than 240 million tons of green and blue (CO<sub>2</sub>-neutral) hydrogen is forecast. This could provide investment opportunities of eleven trillion US dollars and sales of 2.5 trillion US dollars. Long-term investors\* could benefit from these developments in the coming decades.

## **Ballard Power Systems**

Ballard Power Systems' stock has clearly shown the vagaries of the hydrogen industry in the past. It has returned more than 394 percent over the past three years. The current share price of 15.49 euros is a long way from the peak of more than 40 euros in February 2021. The share may therefore already have its best days behind it. The share price has been moving sideways since May. The share yield over the last twelve months is 3.80 percent (as of 08/2021). Are we currently seeing buy prices? In fact, there is still a lot to be said for Ballard Power, as the Canadian company is a classic fuel cell stock. It was founded almost 40 years ago and is now the global market leader for fuel cells. In January 2020, the company secured a major order from Germany. It will provide emergency power for cell phone towers.

Ballard Power Systems' stock is also exciting due to the entry of Chinese companies Weichai Power and Broad Ocean Motor. Together, the two hold nearly 30 percent of the stock. This gives Ballard Power Systems better access to the Chinese market. Together with Weichai Power, the Canadians operate a large joint venture in Asia. In addition, many shareholders hope that the Chinese could further increase their share or even take over Ballard Power completely. This would ensure that the share price continues to rise.

However, the involvement in China also harbors dangers. Ballard Power is heavily dependent on the Chinese market. There has been repeated talk of cutting subsidies in China, especially since some projects such as the production of hydrogen trucks have been only moderately successful so far. In addition, partners could copy the technology and continue development without Ballard Power. Compared to other technology companies, Ballard Power Systems is still a comparatively small company. In 2019, it generated sales of 106 million Canadian dollars. For 2021, it is targeting sales of 109 million Canadian dollars. According to current estimates, profits are also not expected before 2022 (as of 08/2021). Ballard Power Systems has secured an order from Indian bus manufacturer Tata Motors to supply 15 hydrogen fuel cells. The order is expected to be completed by the end of 2022. The 70-kW FCmove™ HD fuel cells will be installed in Indian Oil's new buses based in Faridabad.

Another order is for the supply of a fuel cell system for Fusion-Fuel's H2Evora hydrogen project in Portugal. After the announcement of the order, the stock went up almost nine percent. The latest business figures are rather negative. Revenue in 2Q2021 was down 14 percent from the same period last year. Loss per share was 36 percent higher. More orders are needed to get the company sustainably on track and in the black. Despite certain upward price jumps, Ballard Power's stock has been in a sideways trend since May. Overall, the stock has proven to be very volatile, so it is not for the faint of heart.

In addition, the Canadian fuel cell manufacturer is highly valued. Its market capitalization is around \$4.5 billion, and that's with revenues in the range of just over \$100 million and no earnings. Long-term oriented and risk-averse investors\* can get involved with Ballard Power. You can trade the shares of the Canadian fuel cell manufacturer on numerous German stock exchanges such as Xetra, Tradegate Exchange or gettex. Lang & Schwarz offers off-exchange trading.

## NEL

NEL ASA also performed decidedly well after the Corona crash. By December 2020, the share price had risen from 0.76 euros to 3.35 euros. The strongly rising prices of hydrogen stocks have also raised some doubts in the case of NEL ASA. As with other stocks from the hydrogen sector, a longer downward movement followed, which led the NEL ASA share price to now only 1.41 euros. From a three-year perspective, the share's performance is very positive, with a 311 percent gain. The development in the current year will hardly please the shareholders. In the last three months, the share has lost 18 percent of its value. The Norwegian stock index (OBX) made a gain of 5.6 percent in the same period (as of 08/2021).

The Norwegian company NEL ASA has been building electrolyzers, i.e. devices for splitting water into hydrogen and oxygen, for around 90 years. The big advantage is that electrolyzers are also needed when the hydrogen is needed for purposes other than generating electricity in fuel cells. Some time ago, NEL acquired a license from RotoBoost for the RotoLyzer, which should make electrolysis even more efficient. In addition, the company also manufactures hydrogen refueling stations. NEL has just received a major order to build hydrogen refueling stations from Denmark. NEL is also in business with Nikola Motor.

Nikola Motors wants to become for trucks what Tesla is for cars - with the difference that the truck manufacturer does not rely on batteries, but on hydrogen as an energy storage medium. In March 2018, Nikola Motors had already received a major order to produce more than 800 Nikola One vehicles. Again, NEL ASA is supplying the hydrogen refueling stations as well as equipment for the electrolyzers. Not much has remained of the great hype surrounding Nikola Motors. NEL ASA has a stake in the U.S. hydrogen carmaker and has recorded significant losses in the past because of the Nikola Motors share price slump.

Improvement is not in sight. Nikola is expected to deliver just 25 to 50 vehicles in 2021. Meanwhile, prosecutors in New York have filed charges against Trevor Milton, Nikola's founder (no longer with the company).

NEL ASA has been able to steadily increase its sales and expects to achieve 945 million Norwegian kroner in 2021 (after 652 million Norwegian kroner sales in 2020). There will be a significant drop in earnings per share. After 0.91 Norwegian kroner, a loss of 0.47 Norwegian kroner per share is expected for 2021. After a profit of NOK 1.26 billion in 2020, a loss of NOK -703 million is expected for this year. Breakeven might not be reached until 2024. As with Ballard Power Systems, investing in hydrogen shares of Norwegian company NEL ASA is highly speculative.

The NEL ASA share is currently not convincing with its performance. The share price is moving sideways. Additional pressure comes from short traders. According to business agency Bloomberg, 97 million NEL ASA shares are sold short. On July 23, 2021, it announced its entry into a hydrogen project in the Netherlands. Disappointingly, the announcement failed to trigger a share price increase. Analyst opinions differ. Barclays states 3.74 euros as a fair value for the share. JPMorgan has lowered the price target to 1.43

euros. NEL ASA must deliver better figures in the course of the year, especially in loss mitigation. This could provide new impetus and cause NEL ASA share prices to rise.

The NEL ASA share is also traded on the Lang & Schwarz Exchange. It can therefore also be traded via the discount provider Trade Republic. If you do not like the restriction to an over-the-counter trading venue, you can find favorable conditions at Smartbroker. Those who buy via the Berlin Tradegate Exchange, an officially regulated exchange in Germany since 2009, pay no exchange fees. For those who don't like risk, there is still the Irish company Linde plc. Company founder Carl Linde was one of the key founders of modern refrigeration technology and was awarded the Nobel Prize in Physics in 1913. Until 2013, the company was also the largest German supplier in this sector, but in 2014 the business was sold. In 2016, Linde AG merged with US-based Praxair to form the new Dublin-based Linde plc.

## Linde

Carl Linde (Carl von Linde from 1897) was not only a pioneer of modern refrigeration technology, he was also the first to break air down into its individual components on an industrial scale - and gases are now the core business of Linde plc. The company sells both the gases themselves and the machinery and infrastructure to extract them. Linde plc has also invested heavily in hydrogen. With BeeZero, it operates the world's first car-sharing provider for hydrogen-powered cars. Since December 2018, Linde has been a member of the Stoxx 50, the European index of the 50 most important public companies. There, it replaced the major bank Barclays. Because the company is active in numerous other areas, the investment has fewer risks, but also fewer prospects for strong price jumps.

Linde says it has benefited earlier than expected from the merger with Praxair. According to preliminary data, Linde generated sales of \$28.2 billion in 2019, or about 26.0 billion euros. That is about twice as much as in the previous year. But operating profit fell from \$5.2 billion to \$2.9 billion in the same period, mainly due to higher cost of sales. The next year brought rising earnings per share again. Earnings per share are expected to reach \$8.88 in 2021 (\$4.71 in 2020). Unlike NEL and Ballard Power shares, Linde has been in the black for years. The private bank Berenberg believes a price target of 282 euros is possible. The rating remains "Buy". The industrial gases manufacturer has regularly exceeded expectations in recent years.

Although Linde is no longer a German company, its shares are traded on virtually all regional exchanges, especially of course at the company's former headquarters in Munich. However, the most important exchanges are the Tradegate Exchange in Berlin and the Xetra trading platform. At eToro, investors can trade the share commission-free.

## Weichai Power

Like Linde, Chinese company Weichai Power is not a pure hydrogen stock. The company was once China's first diesel engine factory and was called Weichai Diesel Engine Factory until 1992. The company is the most important shareholder in German forklift manufacturer Kion.

In recent years, however, the company has also invested heavily in hydrogen, including joint projects with European and North American companies. As mentioned above, it is a major shareholder in Ballard Power and the British hydrogen specialist Ceres Power. The Chinese also cooperate with Linde, albeit with Linde Hydraulics, a former Linde division in which Weichai Power holds 70 percent. Weichai Power stock is outperforming its peers. In 2020, it returned 14.22 percent. In May through August 2021, the stock posted a 12.5 percent gain. With a price-to-earnings (P/E) ratio of 13.93, the stock is neither undervalued nor overvalued and is within the industry average. Compared to other industrial and machinery stocks, the shares have outperformed with gains of 22 and 23 percent, respectively. That makes the stock a "buy."

Because the company holds shares in Ballard Power, investors should only buy one of the two shares. A crisis of the Canadians would also have an impact on the profits of the Chinese. The share is traded not only on the Hong Kong stock exchange, but also on the US NASDAQ and all major German stock exchanges,

including Börse Frankfurt, Xetra and Tradegate Exchange in Berlin. The Weichai Power share is also available to investors for purchase over the counter at Lang & Schwarz.

## **Powercell Sweden**

Powercell Sweden develops and produces fuel cell stacks (fuel cell stacks). Since the company went public in 2017, its share prices rose up to 1,000 percent until the correction due to the Corona virus in February and March 2020. These share price gains are well justified fundamentally, as 2019 was the first year the company made a profit. Despite a loss of about 41.0 million Swedish kronor (3.8 million euros) in the fourth quarter of 2019, the company posted a profit of SEK 438.0 million (41.5 million euros) for all of 2019, according to initial data. At the same time, profits were not planned until 2021.

Although PowerCell Sweden would have made a loss of about 8.5 million euros without a one-time payment of 50 million euros by Robert Bosch GmbH for a development and licensing agreement, the sale of licensing rights shows how innovative the company is. Bosch placed an order in 2021 for 1.3 million euros to develop fuel cells for cooling systems for trucks and trailers. The fuel cells could be used to provide emergency power for telecommunications equipment and similar projects.

In 2020, there was a slump in profits after the positive previous years. Despite increasing sales, the Powercell Sweden share recorded a loss of -2.24 Swedish kronor in 2020. A loss of -1.67 Swedish kronor is also expected in 2021. Powercell Sweden is equipping ZeroAvia with hydrogen fuel cell technology. It will be used in hydrogen aircraft with 19 seats. The order is worth the equivalent of 1.07 million euros for fuel cells. The expansion of the cooperation with Bosch has already been mentioned. Measured against the market capitalization of the industry leaders, the Swedish company is rather one of the smaller fish. It currently stands at SEK 9.1 billion (893 million euros). Powercell Sweden's share price currently stands at 17.40 euros. That is a loss in value of 34 percent over the year. Over the last three years, shareholders have enjoyed a high return of over 500 percent. These good times seem to be over for now. Powercell Sweden shares have been moving in a short-term and medium-term downward trend since July 2021 (as of 08/2021).

## **Future of Hydrogen**

The future of hydrogen as an energy carrier is not clear, and there are still too many financial imponderables. Politicians are promising massive aid for alternative energies. The scope of funded projects is also increasing. The breakthrough of hydrogen technologies will only be achieved in cooperation with large corporations. Comparatively small suppliers such as Powercell Sweden and NEL ASA will face increasing problems as a result of cooperations. It is possible that their share of the overall project will be reduced, which could lead to a drop in sales. For investors, this means considerable financial uncertainties.

Some 30 years ago, hydrogen was already supposed to be "the next big thing." BMW and Linde cooperated, the Munich-based automotive group built the vehicle and the gas specialist, which was still based in Wiesbaden at the time, took care of the infrastructure. But the vision was never realized. However, hydrogen would not be the first technology to achieve a breakthrough only in the second or third attempt. Especially since the political will to promote it exists today. Solar technology, too, only achieved a breakthrough with the help of politicians; in the 1990s, many observers had already written off the technology.

After a price rally in 2020, the shares of the hydrogen sector have crashed. This offers long-term investors opportunities to enter the hydrogen sector of the future. For many smaller hydrogen companies, future prospects look bleak. Without cooperation with the top companies in the industry, hydrogen technology will not establish itself in the market. Hydrogen is not the only technology that could be considered for storing surplus energy. In addition to the lithium-ion battery (see our article on lithium shares) or solid-state batteries (see our separate guide on the giant opportunity solid-state battery shares), other energy carriers are under discussion.

The Fraunhofer Institute for Chemical Technology, for example, is working on a redox flow battery. In this process, a liquid is first broken down into two components using energy. When energy is needed, the two components are combined again and energy is generated. The process is thus similar to electrolysis, but uses different basic materials. Some observers note that electrolysis is an old process and therefore has been widely researched. Major improvements in efficiency or costs are therefore not to be expected. However, this view is controversial.

Many hydrogen stocks have soared in the last three years. When prices rise sharply, as in the case of hydrogen shares in 2020, private investors and investment companies become interested in the market sector. It is not uncommon to buy when shares are already overvalued. In 2000, there was a similar scenario with biotech and technology funds. It took many years for the price losses to be recovered. Further price losses are by no means ruled out for hydrogen stocks, despite the correction in early 2021. The hydrogen market is moving very unevenly in mid-2021. However, investing remains risky, especially given the high price volatility of the recent past. The sharp upward and downward price jumps that followed shortly thereafter show how volatile hydrogen shares are. If the share price continues to rise, not all companies will benefit. The major industrial gas producers Linde, Air Products and Air Liquide represent a far less risky investment for investors than, for example, NEL ASA or Powercell Sweden, where everything depends on the success of hydrogen technology on the market.

Alternatives to hydrogen shares: Hydrogen funds, ETFs and certificates: The number of public companies in the fuel cell sector is very limited. Accordingly, there are only a few securities that have specialized entirely in the subject area. Meanwhile, there are two real fuel cell ETF funds, the L&G Hydrogen Economy UCITS ETF USD Acc and VanEck Vectors Hydrogen Economy UCITS ETF. There are other investment funds from the New Energies theme that also include some hydrogen stocks. If you want to invest in hydrogen in a targeted way, you have to turn to certificates. This close link to overall performance is not surprising, however. Because an index is tracked, the certificate generally neither outperforms nor underperforms the bulk of stocks. More detailed information on the certificate is provided by Morgan Stanley on its website. With the help of electricity, water is first split into hydrogen and oxygen. Later, both elements are combined again. Theoretically, this can also be used to power an internal combustion engine, just as engines can be powered by natural gas. More often, however, hydrogen and oxygen are combined in a fuel cell.

When you say fuel cell, you usually mean a hydrogen-oxygen fuel cell. The two elements combine to form water - producing electricity in the process. At first glance, it seems nonsensical to use electricity to first separate water into its elements and then combine the two again. Of course, in the end, the electricity yield is lower than the effort involved. However, the energy can be stored in this way. More than 170 years ago, the great writer and visionary Jules Verne described the generation of energy from hydrogen. In fact, two problems on the way to a more sustainable use of energy can be solved at the same time.

Currently, it is mainly diesel vehicles that are criticized for polluting the air in inner cities. But experience shows that the limits have been tightened more and more in the past decades. The smog of a large city in the late 19th century, when industrial plants had no filters and almost all households heated with coal, is almost unimaginable from today's perspective. Since a further tightening of the guideline values is very likely, low-emission or even emission-free alternatives are in demand.

In the passenger car sector, car manufacturers are currently focusing primarily on batteries. The success of this technology is by no means guaranteed. For example, the accumulators are often not very environmentally friendly in production. They appear to be completely unsuitable for trucks. The solution could be hydrogen-powered cars. For ships, hydrogen-based technology already seems to be the best solution. The technology is already in use there: The German and Italian navies operate submarines equipped with fuel cells - not least because the process produces hardly any waste heat that could betray the ships.

Hydrogen can also solve another problem. This is because electricity from wind and sun does not always occur only when it is needed. Surplus electricity could be used to produce hydrogen and store the energy. We're talking about almost unimaginable amounts of energy. In his book "Understanding the Energy Transition," Thomas Unnerstall, an energy consultant and former board member of the utility N-Ergie AG, estimates that batteries will be used primarily for short-term storage of electricity. These will compensate for short fluctuations caused by calm winds and clouds and store electricity for the night.

Medium- to long-term storage, on the other hand, will take place with the help of "power to gas," in his opinion, which means that electricity will be converted into gas, for example hydrogen. This is because the gas can be easily stored in the infrastructure that is already in place. There are already storage facilities for gas, and gas can also be stored in the pipelines by increasing or decreasing the pressure. Hydrogen has a very high energy density, relative to weight. That's because it's so light. However, in terms of volume, the energy content in the gas is very low. The gas must therefore either be compressed or cooled to such an extent that it becomes liquid. Both are difficult for vehicles.

Hydrogen only becomes liquid at -252 degrees Celsius, about 21 degrees above absolute zero. Pressurized tanks, on the other hand, require a lot of energy to compress the gas (about 12 percent) and arouse fears of explosion among many drivers, even though the technology is already well advanced. Other techniques, such as adsorption or binding to other elements, are currently being tested. The problems described above mainly concern use in vehicles. It is easier to store surplus electricity from wind and solar energy ("power to gas") because more space is then available. In smaller quantities, the hydrogen produced can even be fed into the natural gas grid. A hydrogen share of up to ten percent should be possible.

If you want to invest in raw materials, you don't necessarily have to go for hydrogen shares. Lithium shares are an obvious alternative. The salt is important for the construction of accumulators. Another future topic is biotechnology. Here, there have been a number of interesting scientific advances that could help new technologies achieve a breakthrough. The industry is also benefiting from the ever-increasing importance of health. All three sectors have a number of representatives who were among the top stocks in 2017 and whose enormous price jumps have made investors envious who discovered the trend themes too late.

Hydrogen stocks hold many opportunities, but also high risks. Therefore, only part of the assets should be invested in them. For someone who invests only 10,000 euros, a position in hydrogen shares of a company worth 1,000 euros is already borderline. There are only a few major hydrogen stocks in Germany. The former German company Linde is strong and has been involved in the hydrogen business for many decades. However, investors should also watch foreign companies such as NEL ASA from Norway, Weichai Power from China or Ballard Power from Canada. Funds and ETFs can also be an alternative.

Market assessments can change by the hour, but investors should take a close look at shares in Ballard Power, electrolysis specialist NEL ASA, China's Weichai Power and Powercell Sweden. The German-British company Linde plc has also been active in the hydrogen business for many years. Funds and ETFs can be an alternative to individual stocks. Hydrogen is considered by many to be the technology of the future on the way to a clean energy supply. For both economic and idealistic reasons, hydrogen and fuel cell stocks can therefore be a good choice. Hydrogen stocks offer opportunities, but they are also risky. High profits are possible, but so are high losses if a company is unsuccessful in research or another technology is faster.

Hydrogen stocks are shares of companies that build technology for hydrogen producers such as electrolyzers. Other companies are involved in the production and distribution of hydrogen. Hydrogen stocks, like other stocks, are traded on the stock exchange. Therefore, you first need a broker or you buy a fund with hydrogen stocks. Hydrogen shares of well-known companies are often available from around €15 each. Funds and ETFs are also available for just over €10 each.

Hydrogen stocks are very volatile, so they fluctuate a lot. Because investors' hopes are primarily directed toward the future, the share price is always influenced by current technical or political developments. If you don't like that, you can turn to shares in large companies like Linde or to funds and ETFs. As with any technology of the future, hydrogen is a risky investment, but one that also offers great opportunities. When switching to electricity from solar and wind power, hydrogen could take on the role of an energy storage device.

The hydrogen theme could prove to be a real money printing machine. The potential uses of hydrogen range from fuel for all kinds of transportation to heating buildings or industrial plants. Many hydrogen stocks have lost value since early 2021. Favourable prices could be used by risk-tolerant long-term investors to enter the market. If, on the other hand, other technologies win the race, high losses in the value of hydrogen shares are conceivable. However, the risk can be spread with funds or shares of a more broadly positioned company. If you are convinced of the technology, you can simply ride out short-term setbacks.