

Power-to-X Gives Power To You

The world is at a crossroads: climate change, environmental degradation, and the ongoing energy crisis are causing global turmoil. Most of these problems can be traced back to overreliance on fossil fuels and the greenhouse gases they emit. But thankfully, we have a sustainable solution.

Power-to-X (P2X) refers to a class of technologies that enable conversion, storage, and utilization of emission-free electricity to produce hydrogen, chemicals, gases, and other synthetic fuels. The process makes use of emission-free energy sources like solar or wind power. As a result, alternative energy

sources such as methane, methanol, dimethyl ether, and ammonia will become easily accessible and affordable, replacing fossil fuels.

The advent of Power-to-X is causing a paradigm shift in energy technology. What was unthinkable a decade ago is now a reality. It has the potential to radically transform our societies. All we need now is a joint effort by policymakers, business owners, investors, and the general public to bring Power-to-X into the mainstream.

Power-to-X along with carbon capture technologies can reduce carbon dioxide emissions and can combat climate change.

Power-to-X is accelerating the Green Energy Transition. How will you use your power?

GreenE² is building a broad-based innovation ecosystem in Finland to serve as the foundation for substantial new business in the field of Power-to-X. The innovation ecosystem is coordinated by [CLIC Innovation](#).

Power-to-X Gives Power To Business

What distinguishes a good company from a great one? Great companies are committed to innovation and creating positive social impact. Fortunately, every company has the potential to reinvent itself and become great.

But there are obstacles that must be overcome first. Most businesses today are concerned about rising operating costs, inflation, and lack of funding for new ventures. Many such problems are exacerbated by the continued use of fossil fuels as an energy source. But there is a solution.

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Finland has a booming renewable energy ecosystem. Many businesses have already embraced the green energy transition and reinvented themselves. Several Finnish companies have received substantial funding in hydrogen and Power-to-X investments.

By supporting green energy initiatives, you too can increase your company's

competitiveness, save money, position yourself as an industry leader, and even attract international funding. Thanks to Power-to-X, you can produce your own energy now.

The choice is yours: will your company be a trailblazer or a laggard? A merely good company or a great one?

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Power-to-X Powers Investments

Unicorns are hard to find, but they are real. Those who know what to look for and where to find one will be rewarded. Most unicorns use new technology to solve old problems. Yet no problem is more pressing today than climate change caused by fossil fuels. But thankfully, we have the solution to combat it.

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Finland is an attractive destination for investments for various reasons, including the availability of affordable and reliable clean energy, access to clean water, seamless collaboration between the public and private sectors, a stable operating environment, and sector integration of the different energy markets. According to Finland's transmission system operator Fingrid, the Finnish hydrogen market alone will be worth 2 billion euros per annum by 2030, and nearly 8 billion euros by 2040*.

Multinational companies like Google and Amazon have made investments in

renewable energy to ensure adequate power supply to their data centres in Finland. Google, for instance, has agreements with 200 MW scale wind farms in the country.

Investments make things happen. The International Energy Agency estimates that investments in electricity grids must average approximately USD \$ 600 billion annually until 2030 to reach the Net Zero Scenario. This is the hour of need. Will you fund the next unicorn?

*Fingrid ja Gasgrid 17.6.2022, page 20: https://www.fingrid.fi/globalassets/dokumentit/fi/tiedotteet/sahkomarkkinat/2022/skenaariokonsultaatio_esitysmaateriaali_webinaari_17-6-2022.pdf

Let Power-to-X Empower Your Decisions

Great leaders aren't afraid of making tough decisions. In times of crisis, such leaders are prepared to take any action necessary to alleviate the situation. Currently, we are facing an unprecedented energy crisis that must be resolved before it is too late. Fortunately, we have the solution.

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More support for Power-to-X initiatives is needed for Finland to remain a global leader in emissions reduction. We have the technologies, and the industry can implement the processes already today. The bottleneck is not technical but related to regulation, promotion of sector integration, and investments. Clear permit procedures for wind power plants are required, as is the construction of necessary infrastructure.

The race is on. Well-targeted and ambitious regulations must be passed to accelerate the development of the hydrogen economy. The time for decisions is now. Are you the leader we need?

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Power-to-X Are Your Superpowers

You can be a superhero! The worsening climate change and energy crisis are reaching a breaking point. We can all be superheroes and make an impact. But every superhero needs something to fight with. Power-to-X can be your superpowers.

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Thanks to Power-to-X, you too can produce your own energy. Homeowners are increasingly setting up solar panels, and some have even built small wind farms to generate electricity. Because Power-to-X technologies make it possible to store energy, you can sell any excess electricity you produce to others.

Remarkably, we are witnessing the rise of Prosumerism – where consumers become producers.

We can also do our part by installing energy-efficient heating and cooling systems in our homes and switching to electric vehicles. By adopting a more sustainable lifestyle, such as lowering room temperature, we can drastically reduce our living expenses. Furthermore,

we should press policymakers to set more ambitious climate goals.

The Green Energy Transition is in full swing. It is a win-win proposition: good for our wallets and great for the environment. So, what are you going to do about it? Will you use your Power-to-X superpowers and become a superhero?

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