



Reference case:

P2X Solutions

“Electrofuels such as methane, methanol, and ammonia are an important step in our progress towards the carbon neutrality goals of transport. Electrofuels produced without emissions can be used in existing internal combustion engines and thus contain a huge emission reduction potential. We are proud of our cooperation with Q Power, another pioneer in domestic green technology.”

Herkko Plit, CEO P2X Solutions

Harjavalta Green Hydrogen Plant

The production capacity of green hydrogen is 20 MW. Construction at the site began in the fall of 2022 and the plant is scheduled for completion in 2024. According to the schedule, the delivery and commissioning of the synthetic methane production plant to be built in Harjavalta will take place at the same time as the hydrogen production plant.

The company further processes some of the produced green hydrogen into renewable synthetic methane in the Q Power methanation plant. The process also generates heat and oxygen as by-products, which can be utilized in industrial processes.

Paving the way for producing sustainable energy at the industrial scale: Q Power and P2X Solutions lead the change with Finland's first synthetic methane plant

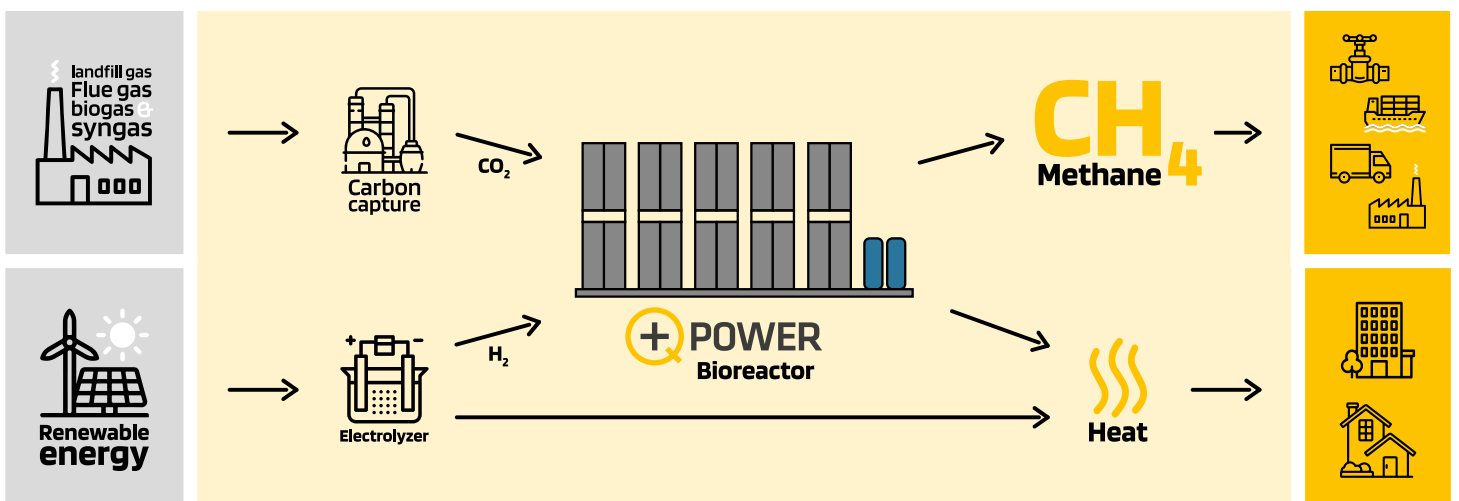
P2X Solutions

P2X Solutions, a Finnish pioneer in green hydrogen and Power-to-X technology, is constructing Finland's first industrial-scale green hydrogen production plant and methanation unit in Harjavalta. P2X Solutions produces green hydrogen completely emission-free through electrolysis of water using renewable energy sources.

Q Power-to-X

We offer full life cycle turnkey solutions from expert services to plant design, implementation, and operation.

Q Power methanation process





Enabling a Greener Future for Industrial Sites with Sustainable Q Power-to-X Solutions

At Q Power, we understand the importance of sustainable energy production and the potential for Power-to-X technology to revolutionize the energy sector. That's why we offer turnkey Power-to-X solutions and synthetic methane production plants.

The first step is expert evaluations of the Power-to-X potential of industrial sites, biogas producers, landfills, and green hydrogen producers, providing valuable insight into how your facility can produce e-fuels and reduce its carbon footprint.

Our team of experts will work with you to evaluate the feasibility of implementing Power-to-X solutions at your site, providing detailed assessments of the technologies and processes that can help you unlock the full potential of sustainable energy production. Whether you're looking to generate renewable energy, reduce greenhouse gas emissions, or enhance the efficiency of your industrial processes, we can help you achieve your goals.

Why choose Q Power

Higher tolerance to impurities: Biological methanation can tolerate higher levels of impurities in the input gas, such as hydrogen sulfide and siloxanes, compared to catalytic methanation. This reduces the need for pre-purification and makes the process more cost-effective.

Lower energy consumption: Biological methanation operates at lower temperatures and pressures, resulting in lower energy consumption compared to catalytic methanation, and next to this Q Power's methanation does not require mixing. This makes Q Power's technology more environmentally friendly and cost-effective with a process efficiency of 82%.

Enhanced flexibility: Biological methanation is highly flexible and can be easily adjusted to accommodate varying gas inputs and fluctuations in demand. This makes Q Power's technology ideal for a wide range of applications and industries, from landfill gas refinement to biogas upgrading.

With our robust and scalable synthetic methane production technology, we offer a flexible and adaptable solution that can be tailored to meet the specific needs of your facility. So why wait?



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Choose Q Power for Sustainable Energy Solutions

At Q Power, we are committed to providing sustainable energy solutions that benefit both the environment and our customers. By using surplus gas in our methanation process, we can turn a problem into a resource, reducing greenhouse gas emissions, producing renewable fuel, and minimizing waste. Choose Q Power for your energy needs and join us in creating a cleaner, more sustainable future.

Contact us today to learn more about utilizing your surplus gas in energy production.

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Q Power is a Finnish power-to-X technology company with patented solutions for storing renewable energy and replacing fossil fuels.

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