

Membrane-electrode assembly (MEA)



<https://www.mebius.si/home>

Na jami 3

SI-1000

www.mebius.si

De Challenge

The insufficient power density and significant production cost of current hydrogen fuel cell systems affects the competitiveness of fuel cell technologies in various market segments. There is also a requirement to lower the precious metals content.

De Solution

The solution is an improved membrane-electrode assembly (MEA) component for polymer electrolyte membrane fuel cells (PEM FC) with a better catalyst, which delivers more power with less platinum used, and a new production method that is more reliable, modular and has lower capital expenses (capex).



De Businesscase

In the market segment of 1-10 kW FC stacks for stationary applications, the product offers:

- Lower production costs for stack builders by 18-29%
- Increased power density by 30%
- Increased efficiency by 10%
- Increased durability by 50%

About EIT InnoEnergy

EIT InnoEnergy operates at the centre of the energy transition and is the leading innovation engine in sustainable energy, bringing the technology and skills required to accelerate the green deal, progress towards Europe's decarbonisation goal, and improve energy security. Ranked as Europe's top impact investor in cleantech in 2022, named in 2023 as a top 10 active deeptech investor by Sifted, and recognised globally as the most active sustainable energy investor, EIT InnoEnergy backs innovations across a range of areas. These include energy storage, transport and mobility, renewables and sustainable buildings and cities – leveraging its trusted ecosystem of 1200+ partners and 29 shareholders.

EIT InnoEnergy is the driving force behind three strategic European initiatives which include the European Battery Alliance (EBA), the European Green Hydrogen Acceleration Center (EGHAC) and the European Solar Photovoltaic Industry Alliance.
www.innoenergy.com