BotH₂nia Hydrogen Valley

SCAN ME

Finland’s west coast offers abundant and affordable renewable electricity

The BotH₂nia association is applying for an official H_2 valley status for BotH₂nia Hydrogen Valley from the EU's Clean Hydrogen Partnership. The proposed valley, located in northern Baltic Sea region, spans seven of Finland’s coastal NUTS3 areas: Southwest Finland, Satakunta, Pirkanmaa, Ostrobothnia, Central Ostrobothnia, Northern Ostrobothnia and Sea Lapland.

Rich in renewable energy

Over half of Finland's electricity is produced from renewable energy sources. The valley area produces over two-thirds of Finland's wind power. Fingrid’s electricity grid is robust throughout the country. By the early 2030s, Gasgrid Finland’s H_2 infrastructure (PCI) is also set to trace through the area.

Over 350,000 tonners of clean hydrogen every year

By 2030, the region is projected to produce over 350,000 tonnes of clean H_2 annually, with most hydrogen production in the BotH₂nia Hydrogen Valley powered by electrolysis and renewable electricity.

Over 15 hydrogen value chains

BotH₂nia Hydrogen Valley encompasses over 15 value chains, covering all stages from hydrogen production to storage, transport and offtake.

Several promising projects demonstrate feasibility

BotH₂nia Hydrogen Valley has already seen the commissioning of significant hydrogen production facilities.

We attract large-scale investments

BotH₂nia Hydrogen Valley is set to attract over €3 billion in investments by 2030, underscoring its pivotal role in advancing green hydrogen and e-fuel production.

Variety of end uses

The 15 hydrogen value chains currently listed in BotH₂nia Hydrogen Valley are expected to be operational by 2035, producing hydrogen for a range of applications.

Innovative companies with scalable technologies

The region is home to world-leading technology companies seeking development and scale-up opportunities, investing €350 million in R&D annually. These include global corporations such as ABB, Danfoss, Hitachi Energy and Wärtsilä, as well as numerous smaller technology firms and start-ups.

Read more about BotH₂nia Hydrogen Valley and the BotH₂nia association at www.both2nia.com

BotH₂nia Hydrogen Valley by 2030

H_2 production: 350+ Kt/a

Electrolyzer capacity: 3,300+ MW

eMethane production: 95.7 Kt/a

eMethanol production: 1,014.2 Kt/a

Renewable ammonia: 220 Kt/a

District heating: capturing 1,314 MWh/a

Natural CO_2 for carbon capture: 64.2 t/a

Annual R&D investment: €350 million

CO_2 avoidance potential: 5,677 ktCO_2/a

*All figures are estimates based on publicly available information

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