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AFRY press release

AFRY to be engineering partner in Fortum's hydrogen study in Raahe, Finland

Finnish-based energy company Fortum and AFRY have agreed on an engineering assignment, when Fortum explores prerequisites for fossil-free hydrogen production at steel company SSAB's site in Raahe, Finland.

Fortum and the steel company SSAB have launched a joint commercial feasibility study and technical FEED (Front End Engineering Design) study to explore the possibilities of producing hydrogen-reduced fossil-free sponge iron in Raahe, Finland. In line with its strategy, Fortum wants to drive the development of a hydrogen economy in the Nordics together with its customers and partners.

In the project AFRY will support Fortum in studying the technical and commercial feasibility of a hydrogen production plant with a maximum capacity of 700 megawatts. AFRY is responsible for the basic engineering of the plant. An environmental impact assessment process related to the production of hydrogen will also be launched during the study. The study is estimated to be completed in the second quarter of 2024.

Fossil-free hydrogen plays a significant role as industries strive to reduce their carbon dioxide emissions, as it can significantly decrease emissions in the production of materials such as steel, ammonia, and methanol. Hydrogen also helps balance the fluctuations in energy production and consumption, which are increasing as renewable sources like wind power are increasingly utilized.

"I am delighted that we can leverage AFRY's strong expertise in this significant project of the future. The scale of the hydrogen solution under investigation is so large that the study itself is a significant step in developing industrial-scale hydrogen competence in Finland," says Mikko Muoniovaara, responsible for Fortum's hydrogen projects in Finland.

"We are grateful for the opportunity to support two important clients, Fortum and SSAB, in this significant green transition project. This project also proves our strong expertise in renewable hydrogen production technology and engineering. Our longstanding partnership with Fortum in the engineering of major industrial projects continues in this assignment," says Tuukka Sormunen, Head of Global Business Sector Chemicals & Biorefining at AFRY.

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Interested in learning more? Hydrogen enables a carbon-free future in multiple sectors. Green hydrogen plays a key role in the transition to carbon-free electricity generation, industry, and transportation. Finland has excellent conditions to harness the opportunities of the hydrogen economy due to its relatively low-carbon electricity generation capacity and a strong electricity transmission grid. Read more: [Power-to-X | AFRY](#)

About Fortum

Fortum is an energy company which core operations are in the Nordics and consist of CO₂-free power generation, electricity sales, district heating as well as recycling and waste solutions. Fortum's share is listed on Nasdaq Helsinki.

AFRY provides engineering, design, digital and advisory services to accelerate the transition towards a sustainable society.

We are 19,000 devoted experts in industry, energy, and infrastructure sectors, creating impact for generations to come. AFRY has Nordic roots with a global reach, net sales of 24 BSEK and is listed on Nasdaq Stockholm.

Making Future