

# Exploring Hydrogen Facilities in Trøndelag – Opportunities and Challenges

Jalili Zohreh<sup>1</sup>

<sup>1</sup>NTE Energi AS, Trondheim, Trøndelag, Norway

*Corresponding author's e-mail address: Zohreh.jalili@nte.no*

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## **ABSTRACT**

**NTE Energi, with a long-standing history of expertise in hydropower spanning over a century, embarked on a pioneering journey into hydrogen investments four years ago. Committed to fostering a sustainable, zero-emission future, NTE Energi initiated an innovative hydrogen project that encompasses the entire value chain for the maritime sector.**

**Our most recent milestone achievement is a small-scale facility located in Rørvik, Trøndelag, where hydrogen gas production has commenced. This facility provides hydrogen as a clean fuel for the innovative hydrogen electric service boat operating within the fish farming industry. Equipped with production, storage, and a bunkering station, NTE's facility stands as a symbol of innovation, delivering green hydrogen at a pressure of 350 bar. Notably, the bunkering process efficiently transfers 100 kg of hydrogen from the land facility to the boat's storage bottles within a brief timeframe of 12-15 minutes.**

**We will delve into the evolutionary journey of the project, tracing its development from conceptualization to operationalization. Here, we review the challenges underway and how to overcome them to achieve the milestones in the project.**

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## **References**

1. NTE Energi's Pilot E facility