

## **RANA UTVIKLING**

## VIEWS FROM RANA DEVELOPMENT AGENCY on the Public Consultation; Roadmap of an EU Hydrogen Strategy

Public onsultation

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## Views from North Norway on the Public Consultation; Roadmap of an EU Hydrogen Strategy

Rana Development Agency, located at the Arctic Circle in North Norway, welcomes the commitment from the EU on hydrogen and the opportunity to give feedback. Stakeholders in our region has recently committed to an initiative to produce green hydrogen for an energy-intensive industry and wish to be a forerunner in the green transition of Europe.

Rana Development Agency would like to put forward some points we consider important to be reflected in the EU Hydrogen Strategy.

Mo i Rana, Norway, June 2020

- Production and use of hydrogen depend on factors such as input costs, the structure of energy systems, the maturity of the technologies, as well as the economic and political framework. These are all challenges that needs to be addressed in the development of the EU Hydrogen Strategy, in order to succeed and become a carbon neutral continent.
- In our opinion, hydrogen is vital to reduce emissions from transport and industry. For hydrogen to be a low- or emission-free energy source, it must be produced with no or very low emissions. Further, for hydrogen to become an attractive alternative, three factors are important:
  - o affordable renewable energy that can supply cost efficient hydrogen
  - o a strong carbon pricing regime
  - o consumer power
- To further develop the disruptive technology required for the energy transition via hydrogen, research and innovation is vital. Therefore, funding R&I to develop these technologies, as well as to develop an international hydrogen market with the infrastructure necessary, will be important to fulfil the goals of the strategy. Targeted calls for funding, that cohere with the specific challenges identified in the strategy, will be of great importance for the energy-intensive industry sectors in North Norway.
- Developing a hydrogen market entails increased demand for hydrogen fuels. However, this
  requires a combined effort from businesses and policy makers. Leading innovators are
  required to break market barriers which increase the risk of failure; hence, this will demand
  special risk-alleviating policies. Smaller, regional actors are especially vulnerable to global
  competition, demand volatility and geopolitical risk.
- One part of developing a market for hydrogen, is to develop incentive structures that
  promotes the use of green products. For instance, to enforce requirements for low carbon
  footprints for public procurement, the construction sector and other sectors heavily
  dependent on products from energy intensive industries, will have to choose differently.
  Furthermore, a sufficient reward for reducing CO2 will provide the sectors with motivation
  to choose green production and products. Thus, an increase in the price for CO2 emissions
  globally is necessary to ensure that the production of green hydrogen, carbon capture and



storage are profitable.

- Capacity in the transmission grid to transfer out of North Norway is an excellent reason for
  onsite production and will be of additional benefit for the existing green industry. This can
  also make it attractive for companies to produce green hydrogen in North Norway, where
  both wind power and hydropower is easily accessible. The hydrogen plants can be
  connected directly with the power production facility. In addition, Norway has recently
  launched a new "National Hydrogen Strategy", stating the fact that hydrogen will be a
  considerable focus for both Norway and North Norway in the years to come.
- An impressive case from our region; Mo industrial park, MIP, along with STATKRAFT and the Spanish family owned company CELSA, has recently launched a new project, "Hydrogen Hub Mo", for green steel to be produced by hydrogen on site by 2022. By establishing an electrolysis-based hydrogen production, the stakeholders wish to develop a complete value chain, by using smart sector integration for green hydrogen for industrial use. As a result, the output will consist of the greenest reinforcement steels in the world.

By developing the Hydrogen Hub, the industrial park will be able to further transform the energy intensive industry into an even greener industrial cluster. The project aims to be a pioneer in the use of hydrogen to produce steel. Projects such as these should be looked to when EU develops both the strategy, technology and market for hydrogen. Thus, taking advantage of the actors who already make headway in providing economically and environmentally sustainable solutions to the challenges the strategy seeks to address.

North of Norway has as mentioned surplus of hydropower production, and Mo Industrial park is located nearby the power plants. Hence, products produced in such areas will give the lowest carbon footprint. According to "*LCA4CCU - Guidelines for Life Cycle Assessment of Carbon Capture and Utilization*", March 29, 2020 in EU, products from for example CO2 and hydrogen will give the most favourable values when produced in areas such as North Norway.

In conclusion, we do support the establishment of a European Partnership for Clean
Hydrogen and look forward to further cooperation, both in developing the strategy, as well
as to integrate it in our businesses daily production.

Rana Development Agency appreciate your consideration of the above points in the EU's future development of the EU Hydrogen Strategy. Continuing the dialogue with the EU on sustainable solutions is therefore of high value to us, making sure that collaboration on the green transition remains a key item on the public agenda.

For any questions or further information, please contact Ole Kolstad: <u>ole.kolstad@ru.no</u>

Yours Sincerely,

Ole M. Kolstad, CEO Rana Development Agency



## About Rana Development Agency

The agency facilitates new business activities and help to improve the framework conditions for business operators. Rana Municipality has a vision of growth, which implies that Mo i Rana wish be an engine for regional growth and development. Thus, in heart of RU's work is business development; to facilitate for new establishments, as well as to develop- and support existing operations.