Press release

Groundbreaking ceremony for green hydrogen production in Langenhorn and official opening of the Dörpum production site

Green hydrogen project eFarm about to be finalised

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eFarm in North Frisia reaches further milestones: planned in 2016 and winner of the German Mobility Award in 2022, the project is about to be finalised after the groundbreaking ceremony for hydrogen production at the Langenhorn site and the official opening of the Dörpum production site. This was celebrated on Thursday by Langenhorn's mayor Olde Oldsen, Bordelum's mayor Susanne Bahnsen, District President Frank Zahel and the Managing Director of the eFarm André Steinau, along with other shareholders and eFarm Nordfriesland project participants.

"It's been an eventful time," recalled André Steinau, Managing Director of eFarm Nordfriesland: "With the symbolic ground-breaking ceremony at the Langenhorn site, only one last piece of the puzzle is now missing from the eFarm Nordfriesland project. It has made me feel proud again and again to have created a blueprint for sustainable and regional hydrogen infrastructure through this project. Here we're seeing at first hand how this can work: 100% renewable energy for all."

Olde Oldsen, Mayor of Langenhorn, said: "We're thrilled that our municipality is now actively becoming part of the energy turnaround. With green hydrogen from Langenhorn, we'll soon be contributing to clean transport in the region."

After the symbolic groundbreaking ceremony for the electrolysis plant in Langenhorn, the festive party travelled by hydrogen bus to Dörpum, a district of Bordelum. The official opening of the production site means that from now on more than 35 tonnes of green hydrogen per year will be produced here and made available for emission-free mobility. Susanne Bahnsen, Mayor of the Municipality of Bordelum: "Dörpum and the entire municipality of Bordelum already cover all their electricity needs from wind power, photovoltaics and biogas. Now we can do even more with the wind power which is so abundant here in our area – and export it in the form of green hydrogen to the nearest hydrogen filling stations."

The eFarm project creates acceptance for renewable energy in the region by achieving visible benefits for the population at large. It has a grid-serving effect within the energy system because it draws on surplus electricity and makes better use of existing capacity. Both factors help accelerate the energy turnaround.

eFarm Nordfriesland – from concept to lighthouse project

Developed from a concept that was initially born in 2016, the use of wind power from the region to produce green hydrogen as a fillable fuel directly on site became a reality after less than five years: the eFarm Nordfriesland started regular operation in August 2021. Between the idea and the actual realisation lay a feasibility study, various applications for funding and a lot of hard work at the local construction sites. But there were some real highlights, too, such as the inauguration of the first production site in Bosbüll by the then Federal Minister of Transport Andreas Scheuer and the presentation of the German Mobility Award in the category "Change" by the Federal Ministry of Digital Affairs and Transport (BMDV) in 2022.

The symbolic groundbreaking in Langenhorn and the opening in Dörpum now mean the project is entering the home stretch. The original concept is expected to be fully implemented by the end of 2023: eFarm Nordfriesland will be in operation with five electrolysers at four production sites, two H2 filling stations, two hydrogen buses for public transport and over 60 registered fuel cell vehicles in the Nord Frisia district.

The eFarm principle: green energy from hydrogen

The pioneering achievement of the eFarm project lies in the use of hydrogen as a means of storage and a sustainable energy source for mobility. The electricity from regional wind and solar plants is converted into green hydrogen by electrolysis at four sites in North Frisia. It is then compressed, stored in mobile storage containers and transported by truck to the H2 filling stations in Niebüll and Husum. Here, fuel cell vehicles can fill up with hydrogen. The amount produced per day is enough to run 12 buses or 120 cars. The heat generated during electrolysis is fed into the local heating network, which means it is put to direct use in the municipalities of the region. In this way it is possible to utilise almost 95 per cent of the volatile wind energy and make it available to various sectors; other plants often have to be shut down, so they are less efficient.

Following the example of eFarm, regional hydrogen networks have also been established in other municipalities and districts together with local project partners. In East Frisia GP JOULE initiated the H2NORD project, for example. And in Bremerhaven, Kiel and Waiblingen, too, initial construction work is soon due to start to enable the production of green hydrogen and its use in mobility.

Images

Caption: Janne Petersen (Ockholm-Langenhorn Erlös- und Infrastruktur GmbH & Co. KG), Hansjörg Brunk (Ockholm-Langenhorn Erlös- und Infrastruktur GmbH & Co. KG), André Steinau (Managing Director of eFarm and GP JOULE HYDROGEN), Frank Zahel (District President North Frisia), Olde Oldsen (Mayor of Langenhorn) at the symbolic groundbreaking ceremony in Langenhorn.

Caption: After the groundbreaking ceremony, the hydrogen bus took the party to Dörpum, where the production site was officially opened with the cutting of the ribbon by Norbert Möllgaard (UW Dörpum GmbH), Frank Zahel (District President of Nord Frisia), Susanne Bahnsen (Mayor of Bordelum), André Steinau (Managing Director of eFarm and GP JOULE HYDROGEN).

About GP JOULE

As an integrated energy supplier, GP JOULE is active in all areas of the energy value chain: from generating to using energy, from consulting to financing, and from project planning to construction and service. GP JOULE produces and markets wind and solar power, green hydrogen and heat and makes use of it where it is most effective: in electric and hydrogen-based mobility, in households and in industry. GP JOULE has been shaping the future of energy in Europe from Germany since 2009. With the aim of delivering a secure, independent and sustainable supply of energy. 100 % renewable energy for all.

GP JOULE received the German Mobility Award for the hydrogen mobility project eFarm in 2022.

About eFarm

eFarm is a joint hydrogen project that was initiated by GP JOULE in 2017. The company eFarming GmbH & Co. KG involves 20 regional shareholders, including citizens' wind farms, solar parks and municipal utilities. In the course of the project, a local hydrogen infrastructure was created, ranging from production and electrolysis through to distribution and fleet use in fuel cell vehicles. The project includes ten electrolysis sites near existing wind farms, two hydrogen refuelling stations, two fuel cell buses and thirty fuel cell cars so far. Interest has already been expressed in the acquisition of another approximately 100 vehicles. The waste heat generated at the electrolysers is used to heat buildings.

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