Media release
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Green hydrogen: EW Höfe, Alpiq and SOCAR Energy Switzerland mark a new milestone

Lausanne/Freienbach/Zurich – **Alpiq, EW Höfe and SOCAR Energy Switzerland want to look into the feasibility of installing an electrolysis facility with a capacity of up to 10 MW in Freienbach (SZ). Assuming the outcomes of technical and economic preliminary investigations are favourable and all shareholders give the green light, the facility is scheduled to start operating at the end of 2022 and, when completed, it will produce an annual output of around 1000 to 1200 tonnes of green hydrogen to enable zero-emission mobility. In addition, the exhaust heat will be fed into the regional district heating network that is currently being established. The facility will thus set new standards in terms of overall efficiency and make an important contribution to Switzerland's climate-friendly energy supply.**

In the context of the energy transition, green hydrogen is one of the keys to low-emission, decarbonised mobility and undisputedly an important factor in achieving the goals of the Paris Climate Agreement. Together, Alpiq, EW Höfe and SOCAR Energy Switzerland want to mark a new milestone. At the existing former substation of EW Höfe in Freienbach (SZ), the three companies are evaluating whether it is possible to install Switzerland's largest production facility for green hydrogen. With a capacity of up to 10 MW, it will be significantly larger than the current largest facility and will accordingly have a higher output: When fully completed, it will be capable of producing around 1000 to 1200 tonnes of hydrogen a year. SOCAR, EW Höfe and Alpiq are thus taking the production of green hydrogen in Switzerland to a new level.

Saving 14,000 tonnes of CO_2 thanks to green hydrogen from Freienbach

The plan is to produce green hydrogen exclusively using electricity from renewable sources direct from the grid in Freienbach. It will be used primarily for mobility – specifically for heavy goods vehicles and applications where battery-electric systems are not a satisfactory solution. The green hydrogen produced in Freienbach could, among

other applications, be used to power a maximum of approximately 200 fuel-cell electric commercial vehicles. Compared to the use of diesel trucks, this would prevent the emission of some 14,000 tonnes of CO_2 a year.

Pipeline to supply hydrogen to the fuelling station at the motorway service area

The planned hydrogen production facility will also play a pioneering role in other respects. The green hydrogen will be transported with zero emissions via a pipeline from the production facility at the existing former substation to the current Fuchsberg motorway service area, where SOCAR will install hydrogen fuelling stations on both sides of the motorway. By integrating the new facilities into existing infrastructure, forward-looking hydrogen technology can be efficiently and cost-effectively added to the current offering there.

At the same time, a filling station is to be built at the service area so that the hydrogen that is not sold directly at the Fuchsberg service area can be supplied to other hydrogen fuelling stations in Switzerland. These are currently being built as part of a unique, cross-sector hydrogen mobility system operated by Hydrospider, Hyundai Hydrogen Mobility and the members of the H2 Mobility Switzerland Association. Thanks to the pipeline and the filling station directly on the site of the motorway service station, no additional traffic will be generated in the neighbouring villages.

Setting new benchmarks in energy efficiency

In addition, the project should set new benchmarks in terms of energy efficiency: In a second phase, the project partners plan to feed the exhaust heat generated during hydrogen production into the regional district heating network that is currently being established by Energie Ausserschwyz. Thus, the hydrogen facility could provide heat to up to 1300 households in the districts of Höfe and March. The possibility of admixing hydrogen into the existing gas distribution network of EW Höfe will also be examined. The existing gas grids represent the ideal infrastructure to introduce renewable energies into the heating market.

Information events for the local community

In the months to come, more work will be carried out to move the planning of the project forward. The project partners will organise special information events for the public. At these, the project will be presented in more detail and all questions about hydrogen as an energy carrier and its central role in decarbonisation will be addressed. The date and time of these events will be announced at a later date.

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About EW Höfe
EW Höfe AG is the largest combination utility in the Lower and Upper Lake Zurich region. It offers the municipalities of Feusisberg, Freienbach and Wollerau above-average security of supply in the fields of electricity, gas and telecommunications. As an energy and telecommunications provider, it offers its customers innovative and sustainable solutions. EW Höfe is the main shareholder of Energie Ausserschwyz AG, which will supply zero-carbon district heating and electricity from regional renewable energy sources starting in 2022. www.ewh.ch

About SOCAR Energy Switzerland
SOCAR has a reputation for premium, high-quality products and services in the Swiss petrol station and energy market. At the more than 200 SOCAR petrol stations, people on the move can find everything they need for their daily needs. As a modern mobility provider, SOCAR is constantly expanding its range of future-oriented technologies. SOCAR has been a member of the H2 Mobility Switzerland Association since June 2018. SOCAR Energy Switzerland is a subsidiary of SOCAR, the state energy company of the Republic of Azerbaijan. www.socarenergy.com

About Alpiq
Alpiq is a leading Swiss energy services provider and electricity producer. Alpiq offers its customers comprehensive services in the fields of energy generation and trading as well as energy optimisation. As an international energy trader, Alpiq is active on all the important European markets. Alpiq is a shareholder (45% stake) in Hydrospider AG, which since the summer of 2020 has been operating Switzerland's largest facility (2 MW) for the production of green hydrogen at Alpiq's Gösgen hydropower plant. www.alpiq.com