FANZUN



A step towards Energy Strategy 2050

Medienmitteilung

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A new hydrogen project is taking shape in Domat/Ems with an innovative approach. This pioneering plant aims to show how hydrogen as an energy store can play a major role in Switzerland's energy future, with a focus on reducing CO_2 emissions from freight transport. Fanzun AG planned the plant and has already designed several sustainable energy projects with national reach.

A location with enormous potential

The location in Domat/Ems could hardly be better. The pioneering hydrogen project is being built right next to a main traffic route through the Swiss Alps and close to electricity producers and a utility operator. This location in the Graubünden Rhine Valley is particularly valuable for trucks, which need to refuel with hydrogen at strategic hubs.

The technical data of the new plant is impressive. At full capacity, the 2 MW plant can produce more than 300,000 kg of hydrogen per year. This is the energy equivalent of 1,000,000 litres of diesel. A production level like this affects not only energy diversity but also the environment: it could reduce CO_2 emissions by more than 3,600 tonnes per year.

Energy storage as the biggest challenge

Renewable energies have been in the spotlight for some time. However, storage is often a challenge, because nature determines when and how much can be produced. This is where hydrogen comes in as an ideal storage medium. At summer peaks in particular, it makes sense to convert surplus electricity into hydrogen. For economical production, however, continuity is essential. Under the current regulatory framework, it only makes sense to build such plants close to power generation sites.

The first ideas date back to 2017. Shortly afterwards, the specialists at Fanzun AG began searching for a suitable site. Urs Simeon, Partner and project lead: «We knew that hydrogen takes a lot of persuasion. That's why we started very early, quickly got up the learning curve and built up enormous expertise at an early stage.» In hindsight, Simeon says the biggest difficulty in planning was the business calculation, because the plant only makes sense if it is profitable.

It began with a Norwegian investor

The project's origins lead to Per Sandven, a visionary Norwegian investor known for innovative and sustainable solutions. As co-founder and then principal shareholder, Sandven also played a decisive role in the creation and development of Calanda Solar. He contributed significantly to the neighbouring Calinis photovoltaic project. This project in the former Felsberg quarry is operated by Rhiienergie. In 2020, it was the largest photovoltaic plant in the canton of Graubünden, producing an impressive 1,500,000 kWh of electricity a year for around 400 households.

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More projects in the pipeline

Sandven and Fanzun have worked together before, including on the 105% plus-energy Hotel Muottas Muragl in Samedan, which also won a solar award. Their collaboration reflects a shared commitment and vision to accelerate the transition to a more sustainable, CO_2-neutral energy future. Fanzun AG is currently planning further projects in high-alpine solar installations, the so-called «Solarexpress».

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