



Media release

Dagmersellen, 1st of Decembre 2022

Unique energy ecosystem planned

Galliker Transport, Emmi, PanGas and CKW are planning a renewable energy ecosystem in Dagmersellen that is unique in Switzerland. It will be centred around a wood-fired power plant designed to generate heat and renewable electricity, including for green hydrogen, beginning in 2027. The project is an important step on the way to achieving the energy strategy targets of the companies involved as well as of Switzerland as a whole. The four partners expect costs in the range of CHF 200 million.

Construction of an energy ecosystem unique in Switzerland is due to take place in Dagmersellen in the next few years. Transport company Galliker, milk processor Emmi, industrial gas producer PanGas (subsidiary of Linde plc) and energy supplier CKW have signed a joint declaration of intent. "Together with Emmi, Galliker and PanGas, we want to drive forward the energy transition and leverage the planned energy ecosystem to make a significant contribution to decarbonising and diversifying energy supply," explains Martin Schwab, CEO of CKW.

Wood and water from milk processing used to produce hydrogen

The energy ecosystem consists of an upstream wood-fired power plant operated by CKW to produce heat and electricity. PanGas will use some of the electricity to produce hydrogen to power Galliker's fleet of trucks. With "Green Logistics by Galliker", Galliker Transport aims to be carbon neutral on the road by 2050. Galliker has commissioned six hydrogen trucks have been driving on Swiss roads since 2020 and will continue to explore alternative drive solutions going forward, with a focus on hydrogen from local production. In addition, PanGas will extract green CO₂ from the combustion process, for example for use in the food industry.

"At PanGas, we have always been in the business of hydrogen. We are very pleased that this project will allow us to make a significant contribution to CO₂ reduction and bring Switzerland a great deal closer to its decarbonisation target," says Roger Britschgi, Managing Director of PanGas. "PanGas is committed to advancing sustainable hydrogen technologies."

The renewable energy from the wood-fired power plant will help Emmi to cover part of the thermal energy needed at the Dagmersellen site to produce fresh cheese specialities such as mozzarella or ricotta as well as milk powder. The project marks a milestone on the net zero reduction path targeted by Emmi by 2050 and a further step towards reducing in-house CO₂emissions by 60 percent by 2027. Emmi will also

support closed-loop recycling by supplying demineralised water from the production of milk products to generate hydrogen.

“This unique energy ecosystem, designed in conjunction with three regionally based national partners, will pave the way to more sustainable production of our dairy products and reduce our dependence on fossil fuels,” says Marc Heim, Head of Emmi Switzerland.

The wood-fired power plant will produce 100 GWh of electricity and 130 GWh of heat when fully operational. Emmi will use around 50 GWh of the heat. Other possible consumers for the heat produced include local industry and district heating networks in the surrounding villages. The intention is to operate the wood-fired power plant as far as possible with woodchips and waste timber from regional forests. This will require up to 200,000 tonnes of wood per year.

The four companies plan to invest a total of around CHF 200 million in the production, distribution and use of renewable energies.

Specifics of the project under development

Further planning and approvals are required before construction can start on the energy ecosystem. Detailed planning will involve organising the entire value chain. The zoning plan of the municipality of Dagmersellen also needs to be adapted prior to submission of any building applications. The population is being provided with regular updates on the project status. The current timetable foresees commissioning in 2027 at the earliest.

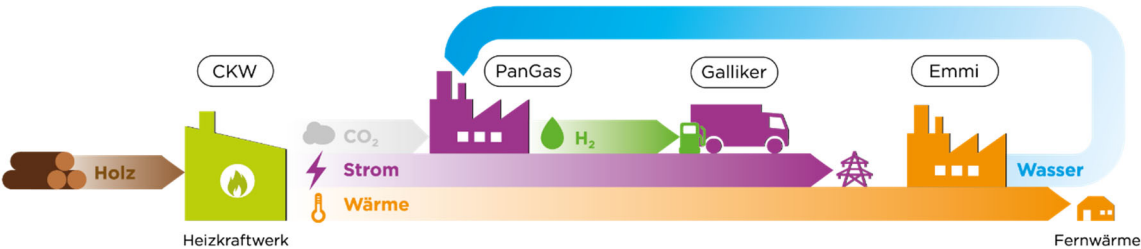


Diagram of the energy ecosystem in Dagmersellen, which is unique in Switzerland.



They are planning a renewable energy ecosystem in Dagmersellen that is unique in Switzerland: Peter Galliker, CEO of Galliker Transport, Marc Heim, Leiter Division Schweiz of Emmi, Martin Schwab, CEO of CKW and Roger Britschgi, Managing Director Switzerland of PanGas.

High-resolution images available at www.ckw.ch/energie-oekosystem

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About CKW: The CKW Group is a leading Swiss provider of integrated energy and building technology solutions. For more than 125 years, the company has been supplying electricity to its now over 200,000 end customers from the cantons of Lucerne, Schwyz and Uri. In addition, it offers innovative products and services throughout Switzerland in the areas of electrical engineering, photovoltaics, heat technology, e-mobility, building automation, ICT solutions and security. The CKW Group has over 2,200 employees throughout Switzerland, including over 400 apprentices in 14 professions. It is the largest private sector trainer of apprentices in central Switzerland. In the 2020/21 financial year, CKW generated sales of CHF 916 million. Axpo Holding AG is the majority shareholder of CKW, with an 81% stake. You can find more information at www.ckw.ch

About Emmi: Emmi is the leading manufacturer of high-quality dairy products in Switzerland. The roots of the company date back to 1907, when it was founded by dairy farmer cooperatives in the Lucerne region. With its focused strategy, innovative products and brand concepts established in Switzerland and beyond, such as Emmi Caffè Latte and Kaltbach cheese, Emmi has grown into an internationally active, listed group (EMMN) with a strong local presence in 15 countries. Emmi's business model is traditionally based on a careful approach to nature, animals and people. In this way, Emmi creates the best dairy moments, today and for generations to come, while also contributing to value creation in rural regions. The company distributes its quality products in around 60 countries and manufactures these at over 30 of its own production sites in nine countries. With more than 9,000 employees, around 70% of whom work outside Switzerland, the Emmi Group generated sales of CHF 3.9 billion in 2021. www.emmi.ch

About PanGas: PanGas AG was founded over 110 years ago and is one of Switzerland's leading companies in the field of technical and medical gases. Its headquarters in Dagmersellen are home not only a cylinder filling plant but also to the central gas laboratory, which produces high-purity gases, specialty gases and gas mixtures, as well as medical gases and dry ice. The air separation plant in Muttenz has been in operation since 2011. Other plants and competence centres can be found in Winterthur, Vufflens-la-Ville and Riazzino. Under the name "Gas & More", PanGas operates specialist stores throughout Switzerland with an extensive range of products for trade industries, leisure, gases & accessories, safety and service. We exemplify our mission of "making our world more productive" each and every day by providing high-quality solutions, technologies and services that make our customers more successful and help conserve and protect our planet. PanGas AG employs around 300 people and is part of the world's leading industrial gases and engineering company "Linde plc". Linde plc generated sales of EUR 31 billion in 2021. www.pangas.ch

About Galliker: Over three generations, our family business has evolved into a customer-focused transportation and logistics service provider in Cargo, Bike, Food, Frigo, Fresh, Healthcare and Car Logistics. We have a national distribution network with closed a cooling chain and a total of 18 branches in 6 countries. We currently employ around 3,300 people, of which around 2,800 are in Switzerland. Through the long history of the company, individual Galliker service areas have emerged. In each of the business units, we carry out national and international transport and logistics services tailored to the respective customer needs and requirements. We store and distribute the relevant goods and carry out appropriate additional "added value services" tailored to customer needs. In this way, we offer our customers an individualized full service from production to the recipient - safely, precisely and on time. Today, four generations are working together with our valued employees on a daily basis to develop the company, so that we can continue to keep our finger on the pulse in the future in line with our motto "Beyond Logistics..." www.galliker.com