

WINNER OF THE  
**watt  
d'or**  
2026



# GAZNAT INNOVATION LAB: GREENGAS FOR THE FUTURE

**ENERGY TECHNOLOGIES CATEGORY** When science and industry collaborate, great things can happen. This is proven by Gaznat's innovation laboratory in Aigle (VD), also known as the Innovation Lab. It is here, at its control and monitoring centre, that Gaznat tests new technologies on an industrial scale in collaboration with EPFL research groups and start-ups. The objective is to bring technologies for sector coupling, decarbonisation and seasonal storage to commercial maturity. The underlying GreenGas concept brings together all the facilities and technologies needed for this purpose

at the Aigle site: combined heat and power (CHP), photovoltaics (PV), electrolysis (power-to-gas), hydrogen storage, carbon capture, methanation and, of course, Gaznat's actual gas network. This energy innovation builds a vital bridge between research and industrial application.

Yann Benoit, network director at Gaznat, explains: "Our goal was to create an innovation platform that would serve as an industrial-scale demonstrator for various technologies. The Innovation Lab acts as a link between industry, start-ups and



Gilles Verdan, CEO of Gaznat, and Yann Benoit, Network Director at Gaznat (fltr)



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Federal Office of Energy SFOE

## + INFORMATION AND ENQUIRIES

**GAZNAT GREENGAS**, 1860 AIGLE

➔ [WWW.GAZNAT.CH](http://WWW.GAZNAT.CH)

**GREENGAS**

➔ [WWW.GAZNAT.CH/PROJECTS/GREENGAS](http://WWW.GAZNAT.CH/PROJECTS/GREENGAS)

EPFL, which can test their technologies there in real-world conditions." The project is supported by the Swiss Federal Office of Energy, the Gas Research Fund (FOGA) and the Canton of Vaud.

The GreenGas energy concept ensures the intelligent integration of the various technologies tested in the innovation laboratory under industrial conditions. It consists of 12 shipping containers, each housing a facility or technology. Six containers are dedicated to GreenGas: one for the solar panel monitoring system and equipment supervision, one for the electrolyser that converts photovoltaic electricity into hydrogen, one for hydrogen storage, one for the cogeneration system, one for carbon capture membranes, and one for the methanation reactor.

Carbon capture technologies and the methanation reactor are particularly promising and are the subject of patents filed by the company. For hydrogen storage, a metal hydride-based technology developed by GRZ-Technologies, a spin-off from EPFL, is used. The hydrogen is absorbed and trapped by the metal structure, allowing it to be stored at low pressure. The CO<sub>2</sub> from the exhaust gases of the cogeneration plant is captured using graphene membranes. This ultra-thin material (on the angstrom scale) is perforated with tiny holes, called nanopores, which only allow CO<sub>2</sub> to pass through. The CO<sub>2</sub> captured in this way can achieve a purity level of over 90% and can then be used for the production of synthetic metha-

ne. This technology is the result of work carried out by a chair funded by Gaznat at EPFL Valais Wallis and Divea, an EPFL spin-off. The methanation reactor was developed jointly by GRZ-Technologies, Gaznat and EPFL Valais Wallis. The catalyst used comes from EPFL. It is based on a layer of ruthenium nanoparticles deposited on aluminium oxide. The fixed-bed reactor uses high temperature gradients (up to 800 °C), which allows for almost complete conversion (99%) of the CO<sub>2</sub> and therefore a high yield of synthetic methane. It is thus vastly superior to existing commercial catalysts.

For Gilles Verdan, CEO of Gaznat, one thing is clear: "These new technologies will enable Gaznat to continue playing a major role in the Swiss energy market."

**WATT D'OR VIDEOS**



---

Since more than ten years, the Swiss Federal Office of Energy rewards best performances in the energy sector with the Watt d'Or. The aim of the Watt d'Or is to increase awareness of these achievements and thus motivate companies, politics and the general public to discover the advantages of innovative energy technologies for themselves. [www.wattdor.ch](http://www.wattdor.ch)



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Federal Office of Energy SFOE

WINNER OF THE  
**watt  
d'or**  
2026



# LIVING IN AN ENERGY-EFFICIENT AND CLIMATE-FRIENDLY WAY AT THE HOBELWERK

**BUILDINGS AND SPATIAL DEVELOPMENT CATEGORY.** The Hobelwerk site in Oberwinterthur demonstrates how sustainable construction works. It was developed and built by the building cooperative «mehr als wohnen» (website available in German), Lemon Consult AG (website available in German) and the Low-Tech Lab in collaboration with other partners. They have ensured that an attractive, resource-saving, circular economy-oriented, energy-efficient and socially well-planned residential and commercial district has been

created. This was achieved through timber construction, reused materials, intelligent energy systems combined with an innovative ventilation concept, climate architecture and social diversity. The vibrant new district is a model for forward-looking, non-profit housing construction in Switzerland.

The building cooperative 'mehr als wohnen' purchased the site of the former Kälin AG wood processing plant in Oberwinterthur in 2018. The plan was to develop a new residen-



Raphael Schär-Sommer from Lemon Consult AG and Rahel Leugger, Managing Director of the 'mehr als wohnen' cooperative (fltr)



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Federal Office of Energy SFOE

## + INFORMATION AND ENQUIRIES

**HOBELWERK**, 8404 WINTERTHUR

➤ [WWW.HOBELWERK-WINTERTHUR.CH](http://WWW.HOBELWERK-WINTERTHUR.CH)

(WEBSITE AVAILABLE IN GERMAN)

➤ [\*\*HOBELWERK AREAL – MEHR ALS WOHNEN\*\*](#)

(WEB PAGE AVAILABLE IN GERMAN)

➤ [\*\*LEMON CONSULT AG\*\*](#)

(WEBSITE AVAILABLE IN GERMAN)

➤ [\*\*LOW-TECH\*\*](#)

➤ [\*\*P+D PROJEKT HOBELWERK\*\*](#)

**WATT D'OR VIDEOS**



tial and commercial district there. Echo chambers were held to gather ideas from the local population for the design of the district. This was entirely in line with the philosophy of the 'mehr als wohnen' cooperative, which sees its projects as platforms for innovation and learning.

The result was a wide range of ideas that were incorporated into the further planning of the Hobelwerk site and successfully implemented by the planning and construction companies involved. «The building cooperative 'mehr als wohnen' has a mission to drive innovation. It therefore decided to explore different themes for three of the five buildings on this site. These included reusing building components, micro-co-living, and exciting energy-related topics,» recalls Raphael Schär-Sommer from Lemon Consult AG.

Circular economy and reuse were consistently implemented, particularly in Building D. This was achieved through the use of timber construction and many reused components, such as façade elements, doors and windows from demolished buildings. No basement was built, which greatly reduced the amount of concrete used. These measures resulted in very low construction emissions for this building. Building D offers cluster apartments, live-in studios and communal spaces that cater to the different lifestyles of its residents. Building C also had a low carbon footprint during construction thanks to its timber construction and the use of local materials.

Buildings C-E are being examined in a pilot and demonstration project by the Federal Office of Energy (Scalable solutions for the path to net zero), and their life cycle assessments and life cycle costs are being evaluated. The aim is to ensure that the approaches tested on the Hobelwerk site can also be scaled up to other projects.

Energy is supplied by photovoltaic systems on the roofs and a dual-fuel heating system with heat pumps and a wood pellet boiler to cover peak loads. Heat generation is controlled by an intelligent, predictive system that processes weather data, electricity production and consumption in real time. An exhaust air system with CO<sub>2</sub> control creates an optimal, energy-efficient indoor climate.

Heat reduction was also an important issue. Rainwater is collected so that it can seep away on the site (sponge city). Trees and green façades improve the microclimate. «Our innovations have been very well received by the residents. Satisfaction with the comfort of the heating and ventilation systems is generally very high,» says Rahel Leugger, managing director of the 'mehr als wohnen' cooperative.

Since more than ten years, the Swiss Federal Office of Energy rewards best performances in the energy sector with the Watt d'Or. The aim of the Watt d'Or is to increase awareness of these achievements and thus motivate companies, politics and the general public to discover the advantages of innovative energy technologies for themselves. [www.wattdor.ch](http://www.wattdor.ch)



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Federal Office of Energy SFOE

WINNER OF THE  
**watt  
d'or**  
2026



# THE RIGITRAC ELECTRIC TRACTOR IS ELECTRIFYING THE FUTURE



Theres Beutler-Knüsel, Managing Director of Sepp Knüsel AG & Rigitrac Traktorenbau AG

**ENERGY-EFFICIENT MOBILITY CATEGORY.** The family-owned company Rigitrac Traktorenbau AG, based in Küssnacht am Rigi, has developed the first production-ready electric tractor with European type approval. The Rigitrac SKE 40 e-direct is emission-free, quiet, manoeuvrable and extremely energy-efficient. This makes it ideal for work where exhaust fumes and noise are undesirable, for example for maintenance work by municipal utilities or in vegetable tunnels or indoor sporting events. The electric tractor is a flagship project that de-

monstrates how even smaller businesses can drive technological innovation forward with passion and perseverance. For managing director Theres Beutler-Knüsel, one thing is clear: «Rigitrac is already building the vehicles of the future.»

«We are a family business with heart and soul. Ecology is very important to us and is at the heart of all our innovations,» says Theres Beutler-Knüsel. In 2016, she took over the management of Sepp Knüsel AG and Rigitrac Traktorenbau AG from



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Federal Office of Energy SFOE

## + INFORMATION AND ENQUIRIES

### **RIGITRAC TRAKTORENBAU AG,**

6403 KÜSSNACHT AM RIGI

➤ [WWW.RIGITRAC.COM](http://WWW.RIGITRAC.COM)

(AVAILABLE IN GERMAN)

### **RIGITRAC IN «WIRTSCHAFT ENTDECKEN»**

➤ [WWW.YOUTUBE.COM](http://WWW.YOUTUBE.COM)

(AVAILABLE IN GERMAN)

## **WATT D'OR VIDEOS**



her parents Sepp and Marlis Knüsel. Her three sisters Edith, Doris and Ruth are also involved in managing the business

Sepp Knüsel founded the company in 1976. As an agricultural machinery dealer and workshop operator, but also with his own band rakes and mowers, he quickly made a name for himself. In 2003, Sepp Knüsel fulfilled his dream of building his own tractor. Rigitrac Traktorenbau AG was born. The first Swiss tractor in many years soon became well known both in Switzerland and abroad. Today, the company has around 45 employees.

Development of the first fully electric tractor began in 2018. The prototype was built using the company's own components, with the support of an electrical engineer hired specifically for this purpose. Many components had to be newly developed in collaboration with suppliers, as there were hardly any components designed for electric operation in agricultural technology at that time. The vehicle went into series production in 2022 as the Rigitrac SKE 40 e-direct. And now the versatile tractor also has European type approval.

«Photovoltaic systems are everywhere today. Even in agriculture and in communes. It would be ideal if this electricity could also be used for road and lawn maintenance or for

snow removal. This idea was the starting point for the development of the Rigitrac SKE 40 e-direct,» recalls Theres Beutler-Knüsel. «All the roofs of our company buildings are also equipped with PV systems.»

«Our team of engineers built our vehicle from the ground up as an electric vehicle. It has several electric motors installed in it. These only draw power when they are needed. This makes the vehicle extremely efficient,» summarises the managing director. Obtaining European type approval was a major challenge for the family business. This was also because the testing procedures for electric tractors did not yet exist.

But perseverance paid off. The small electric tractor is already in use in Switzerland, Denmark, Norway, Germany and Austria. Its battery capacity of 58 kWh (400 V) allows for four to eight hours of operation. With the integrated charger with up to 22 kW of power, the battery can be charged to 80 per cent in around 2 hours.

The entire development and production of the highly efficient electric tractor takes place in Switzerland. And Rigitrac Traktorenbau AG already has plans for the future. Bidirectional charging of larger electric vehicles is being considered.

---

Since more than ten years, the Swiss Federal Office of Energy rewards best performances in the energy sector with the Watt d'Or. The aim of the Watt d'Or is to increase awareness of these achievements and thus motivate companies, politics and the general public to discover the advantages of innovative energy technologies for themselves. [www.wattdor.ch](http://www.wattdor.ch)



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Federal Office of Energy SFOE

WINNER OF THE  
**watt  
d'or**  
2026



# ALPINE FAÇADE SOLAR POWER FOR THE GOMS VALLEY



Damian Zumstein, CEO of endigo Holding AG

**RENEWABLE ENERGIES CATEGORY.** The village of Fiesch is located over 1,000 metres above sea level in the upper Rhone Valley. Energy production in this region is largely dominated by hydropower. But now there is something new to see in Fiesch: an Alpine façade solar power system. It was installed at the newly built headquarters of endigo Holding AG, which offers innovative, sustainable and regional solutions in the field of energy and technology in the Goms region. The lightweight timber construction with its slatted façade is an architectural feast for the eyes. And it represents the

values of the endigo group of companies: firmly rooted in the region, close to nature, future- and system-oriented, and technically competent.

The endigo Group was founded in early 2024. It is an association of six companies that operate hydroelectric power stations in the region, ensure energy supply and offer services in the field of energy and installations. The fundamental decision to build a joint company headquarters was already made back in 2019. «Even during the planning stage of the building, it was essential for us to combine the topics of energy



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Federal Office of Energy SFOE

## + INFORMATION AND ENQUIRIES

**ENDIGO**, 3984 FIESCH

➔ [WWW.ENDIGO.CH](http://www.endigo.ch)

(WEBSITE AVAILABLE IN GERMAN)

**POSTS | LINKEDIN**

➔ [WWW.LINKEDIN.COM/COMPANY/ENDIGO-CH](https://www.linkedin.com/company/endigo-ch)

(AVAILABLE IN GERMAN)

**WATT D'OR VIDEOS**



production and overall aesthetic appearance. For this reason, we installed a specially designed PV system on the façade and a conventional system on the roof. True to the motto: If we, as a regional energy supplier, don't do it, who will?»

In February 2025, around 50 employees moved into the new business centre in Fiesch. Inside, it offers modern and functional workspaces. «The new hub helps us to develop ourselves and the region,» says Damian Zumstein, CEO of endigo. The attractive workspaces and working time models also contribute to this. «For example, we no longer have any problems finding apprentices.»

Heating is provided by a geothermal heat pump. The building's exterior was designed to highlight the themes of sustainable energy supply and resource-conscious construction technology. Photovoltaic systems were installed on the roof and – in a unique design – on the façade in the form of a slatted construction. «There is not yet much experience with Alpine façade PV systems,» says Damian Zumstein. «So we can learn a great deal from our facility and are open to sharing our experiences.»

The slatted construction of the façade consists of specially manufactured aluminium profiles. PV panels were integrated into the slats on the south and west sides. The remaining slats are clad with solid larch wood panels. Overall, the slatted cladding of the building creates a harmonious effect and blends stylishly into the Alpine surroundings. The façade also provides privacy and reduces the amount of heat absorbed by the building in summer.

The façade and roof systems together have a maximum output of 73 kWp with an annual production of around 90,000 kWh. «Our initial experiences with the overall system have been extremely positive. We produce twice as much energy as we consume ourselves, which means we are not only self-sufficient, but can also feed energy back into the regional energy grid,» Damian Zumstein is happy to report.

---

Since more than ten years, the Swiss Federal Office of Energy rewards best performances in the energy sector with the Watt d'Or. The aim of the Watt d'Or is to increase awareness of these achievements and thus motivate companies, politics and the general public to discover the advantages of innovative energy technologies for themselves. [www.wattdor.ch](http://www.wattdor.ch)



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Federal Office of Energy SFOE