



Unique, innovative PV systems for 45 FEDRO-motorway rest areas

aventron, BG Consulting Engineers, Cargo sous terrain and dhp technology have joined forces to form the ABCD-Horizon consortium to produce renewable energy with innovative photovoltaic (PVA) systems at 45 motorway service areas in the Romandie and in the cantons of Valais and Bern. The total output of the plants can be up to 35 megawatts.

The expansion of photovoltaics plays a crucial role in the implementation of the energy transition. For the Federal Council, it is an important component of the Energy Strategy 2050. One possibility here is the installation of photovoltaic systems along Swiss motorways. Last year, the Federal Roads Office (FEDRO) called on companies like aventron to equip in particular rest areas and noise barriers along national roads with systems to produce renewable energy. The federal government provides the corresponding land free of charge. To participate in the tender, aventron joined forces with BG Consulting Engineers, Cargo sous terrain and dhp technology to form the ABCD-Horizon consortium (the name corresponds to the first letters of the companies), which was ultimately awarded the contract for all motorway rest areas in the regions of Romandie, Valais and Bern. The potential for the total of 45 possible plants is 35 megawatts. This would be enough renewable energy to supply around 7,800 households with an average electricity consumption of 4,500 kilowatt hours per year.

The HORIZON folding solar roof, the only one of its kind in the world, made by the Grisons-based company dhp technology, is to be used. It extends or retracts fully automatically depending on the weather. Thanks to the lightweight construction and the patented folding mechanism, wide distances between supports and great heights of up to 6 metres above the ground are possible. This keeps the traffic routes free for large vehicles and goods. HORIZON thus offers maximum flexibility for infrastructure areas such as motorway rest areas with optimal use of solar energy, space and shading.

BG Consulting Engineers is responsible for the overall project management and the planning of the PV systems. Among other things, the engineering firm specialises in the planning and realisation of sustainable and promising energy projects.

The electricity from the PV systems is primarily to be used for the charging infrastructure along the motorways. It can either flow into existing charging points at the rest areas or be stored in batteries. Surplus electricity is fed into the grid and sold to Primeo Energie, Stadtwerke Winterthur and ewb, aventron's three main shareholders, who will contribute their expertise as energy supply contractors, particularly in the field of sustainable mobility.

One long-term buyer of the produced energy is the company Cargo sous terrain, which is part of the ABCD-Horizon consortium. It will build a total logistics system for the above-ground and underground transport of small-scale goods for Switzerland in the coming years, powered entirely by renewable energies.

The construction work on the PV systems is expected to begin in 2024 and should be completed in 2027.

With this project, aventron, together with its shareholders, is consolidating its position as one of Switzerland's major producers of renewable energy. The implementation of the energy transition is for all companies involved in the consortium part of their strategic orientation.

[You can find out more about the project here.](#)

aventron, headquartered in Münchenstein, Switzerland, is an established producer of electricity from renewable sources. The company acquires and operates power plants in the areas of hydro, solar and wind power in Switzerland and selected European countries. In the medium term, the company plans to build up a diversified and balanced portfolio of renewable energies with a total installed capacity of 1000 megawatts and thus become a leading operator of decentralised power plants in Switzerland and Europe. aventron AG offers an attractive investment opportunity in energy infrastructure for long-term investors. The company's shares are traded on the OTC-X of the BEKB (ISIN CH0023777235). www.aventron.com

BG Consulting Engineers AG Recognised for its expertise in prestigious projects such as the Lyon-Turin Base Tunnel, the Grand Paris Express, the Rolex Learning Center in Lausanne, the Institut Curie in Paris and the Stade de Suisse, the BG Group has decided to join forces with WSP. In Europe alone, there are 15,000 professionals committed to inventing the transport infrastructures, energy networks, sustainable cities and territories

of tomorrow. Drawing on our talents as engineers, designers and visionaries, we are pursuing an ambitious strategy to decarbonise the construction sector and digitise our businesses. www.bg-21.com

Cargo sous terrain From 2031, Cargo sous terrain (CST) will provide Switzerland with a privately financed and automated overall logistics system that will ensure punctual deliveries of goods and sustainably guarantee the competitiveness of the economy and the high quality of life of the Swiss population. CST can transport and distribute small-scale goods continuously and reliably. The backbone of the system is a 490-kilometre tunnel system from Geneva to St. Gallen and from Basel to Lucerne, with an additional branch connecting Berne with Thun. The first section of the network runs from Härkingen to Zurich Airport and is about 74 kilometres long. The CST surface logistics system ties in seamlessly with the bundled tunnel access to the cities and uses synergies in above-ground supply and disposal. www.cst.ch

dhp technology The young Swiss company develops and builds the globally unique solar folding roof HORIZON. In 2017/18, the pilot project was put into operation above the sewage treatment plant in Chur. Meanwhile, a further 15 systems are in operation in Switzerland. By the end of 2023, the first two systems in Germany will go into operation, as well as a further eight systems in Switzerland. The HORIZON solar folding roof was supported by the Swiss Federal Office of Energy, the Swiss Climate Foundation and the European Commission. In 2019, it won the Watt d'Or and the Swiss Solar Prize as well as the Swiss Future Prize 2021. www.dhp-technology.ch/en

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