From AI to Grid Stability: Energy Data Hackdays 2026 Kick Off Today

14 real-world challenges from the Swiss energy sector, around 36 hours of intensive work and interdisciplinary teams from industry, research, technology and universities: on 10 September, the Energy Data Hackdays 2026 kick off at the FHNW Campus Brugg-Windisch. The aim is not another theoretical discussion about the energy transition, but concrete solutions, prototypes and new collaborations.

Brugg-Windisch, 10 September 2026
How can AI assess the solar potential of Swiss rooftops more accurately? How can faults in generators be detected at an early stage? What can smart meter data reveal about electric vehicles, heat pumps or photovoltaic systems? And how can an increasingly decentralised electricity grid be operated safely and intelligently?
These and many other questions will be tackled today and tomorrow by participants of the **Energy Data Hackdays 2026** at the FHNW Campus Brugg-Windisch.
This year, participants can choose from 14 current challenges. They have been submitted by organisations including Axpo, Swissgrid, the Swiss Federal Office of Energy SFOE, AEW Energie, ewz, Primeo Energie, the Swiss Data Science Center SDSC, EKT/Anapaya, WeDoWind, EKZ, CKW, Energie360°, Detecon and the Canton of Aargau.

Today's challenges show what will matter tomorrow
This year's challenges clearly illustrate how rapidly the Swiss energy sector is changing.
The Swiss Data Science Center, for example, is looking for a computer vision solution to assess photovoltaic potential on Swiss rooftops more accurately. Axpo is investigating how AI and signal processing can help distinguish genuine partial discharges in generators from electrical noise.
At AEW Energie, teams are analysing anonymised smart meter data and trying to identify so-called "energy fingerprints". For example, whether a household is charging an electric vehicle, operating a heat pump or producing solar power. These and other insights could significantly improve grid planning, forecasting, tariff design, security of supply and flexibility management in the future.
Swissgrid, meanwhile, is focusing on probabilistic forecasts of cross-border energy flows, while ewz is exploring new approaches to grid tariffs. The Swiss Federal Office of Energy is working on an open Energy Knowledge Gateway to make trusted Swiss energy knowledge accessible for AI applications. At EKT and Anapaya, the focus is on the secure transmission of power quality data via SCION.
The challenges therefore cover a broad spectrum, from AI, forecasting and computer vision to smart meters, flexibility, e-mobility, cybersecurity, grid infrastructure and knowledge management.
More than a hackathon: an innovation funnel
The idea behind the Energy Data Hackdays is not only to discuss challenges, but to move them quickly towards implementation.
Before the event, problems are refined, data access is clarified and teams are prepared. During the approximately 36-hour hackathon, first prototypes and solution approaches are developed. Afterwards, successful ideas can be further developed within partner organisations, through new collaborations, start-ups or follow-up innovation projects.

Previous results show that this approach works: since 2019, more than 70 challenges have been tackled through the Energy Data Hackdays. According to the Energy Data Innovation Hub, more than 50 percent of the results are continued after the event. Previous hackathons have already led to new products, collaborations and company creation.
According to project data, one forecasting use case with Swissgrid resulted in annual savings of more than CHF 500,000. A data-optimised district heating network at AEW achieved an efficiency improvement of around 15 percent.

Open innovation instead of innovation in silos
The central idea behind the Energy Data Hackdays is deliberately simple: the complex challenges of the energy transition can hardly be solved by one organisation or discipline alone.
That is why, over two days, energy experts meet data scientists, developers work with researchers, established companies collaborate with young talents, and technological perspectives come together with regulatory and energy-sector expertise.
The hackathon therefore becomes an experimental space for open innovation: companies open up real-world challenges, external teams contribute new perspectives, and within a very short time it becomes clear which approaches have the potential to be developed further.
What started with six partners has grown over the years into an ecosystem of well over 40 organisations from industry, research and the public sector.

From Aargau to a nationwide Swiss innovation platform
The roots of the Energy Data Hackdays are closely connected to the Hightech Zentrum Aargau and the University of Applied Sciences and Arts Northwestern Switzerland FHNW.
As part of the founding organisations behind the first Energy Data Hackdays in 2019, the Hightech Zentrum Aargau and FHNW have played an important role in building and developing the format from the very beginning. To this day, they remain key supporters of the Energy Data Hackdays in German-speaking Switzerland and strengthen knowledge and technology transfer between companies, research institutions and the innovation ecosystem.

What started in Aargau is increasingly developing into a nationwide platform for data-driven energy innovation. This national expansion will continue in 2027.
The next Energy Data Hackdays Lausanne are planned for 20 and 21 May 2027 and will be co-hosted with the Swiss Data Science Center at Biopôle.
For the first time, the Energy Data Hackdays will also expand to Ticino in 2027, bringing the format to Switzerland’s Italian-speaking region.
With editions in German-, French- and Italian-speaking Switzerland, the ambition is clear: to connect regional energy ecosystems, companies, researchers and talents across linguistic and institutional boundaries, and to accelerate the development of solutions that can create impact for Switzerland as a whole.
Talents can show what they can do
The format is particularly valuable for students and young talents.
Instead of getting to know companies only through job advertisements or formal interviews, they work directly with experts on real-world challenges. They can apply technological skills, analytical thinking, creativity and teamwork in practice, while at the same time discovering new companies, professional roles and potential career paths.

For companies, this creates a different form of talent scouting. They do not experience young people only through a CV, but can directly see how they think, learn, solve problems and collaborate with others.
The Energy Data Hackdays therefore connect three topics that are closely linked to the future of Switzerland as a business and innovation location: innovation, knowledge transfer and the development of the next generation of skilled professionals.

Public and media invited on the second day
On Friday, 11 September, the teams will present their solutions and prototypes from 3:30 pm. This will be followed by a networking apéro from 5:30 pm.
Interested visitors will have the opportunity to discover the solutions developed during the hackathon and to connect directly with companies, experts and participants.
Media representatives are warmly invited to visit the Energy Data Hackdays on site. Interviews and conversations with challenge owners, partner companies, organisers and participants can be arranged upon request.

About the Energy Data Innovation Hub
The Energy Data Innovation Hub (EDIH) is a platform for data-driven energy innovation in Switzerland. Its goal is to strengthen open innovation in the energy sector, initiate cross-sector future projects, enable rapid prototyping with energy data and build a sustainable ecosystem for knowledge exchange, collaboration and networking. The Energy Data Hackdays are a central part of this innovation process.