Energy funding programme

The future of energy.

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
Commission for Technology and Innovation CTI
Innovation Promotion Agency

The CTI is the Confederation's innovation promotion agency. It provides consultancy and networking services and financial resources to help turn scientific research into economic results. Making the Swiss economy strong.

A challenge for energy research

The Federal Council and Parliament are planning on making far reaching changes to how Switzerland sources its energy. In accordance with the Swiss Coordinated Energy Research action plan, the CTI has the mandate to finance and manage the creation of research networks between higher education institutions, the Swiss Competence Centers for Energy Research (SCCERs). In addition, the CTI receives additional financial means for research and development projects in the field of energy.

The SCCERs are looking for solutions to the technical, social and political challenges arising as a result of the energy revolution. Eight SCCERs were created in seven action areas. They offer you as a researcher at a Swiss research institution, or as a Swiss entrepreneur, the full spectrum of the current energy innovation chain, taking account of developments in all areas, from basic research through applied R&D to legal, regulatory and behavioural aspects. The SCCERs also provide research infrastructure and many networking opportunities with key experts and young researchers from the fields concerned.

More funds for conventional R&D projects in the energy field
In addition to the regular funding budget, CHF 46 million is available for R&D projects in the energy field until the end of 2016. The regular criteria for CTI projects apply. Membership in an SCCER is not a requirement.

FEEB&D – Future Energy Efficient Buildings & Districts

Reducing the energy demands of buildings is essential for a successful energy revolution in Switzerland. The SCCER FEEB&D in the 'Efficiency' action area focusses on the development of high performance insulation materials, the integration of renewable energies in buildings, the efficient operation of buildings and their integration into local multi-energy grids.

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sccer | future energy efficient buildings & districts

EIP – Efficiency of Industrial Processes

The vision of the SCCER EIP is to enhance the energy efficiency of Swiss industry. Research and development capacities have to be increased to develop advanced concepts and innovations, enabling the industrial sector to reach its energy efficiency targets set out in Switzerland's Energy Strategy 2050 and to improve its competitiveness.

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SCCER eip EFFICIENCY OF INDUSTRIAL PROCESSES

FURIES – Future Swiss Electrical Infrastructure

Renewable energy sources supply the grid with power that fluctuates throughout the course of the day. This presents challenges in terms of their integration into the power system and for the nuclear phase-out in Switzerland. The SCCER FURIES is addressing this challenge by working on optimising and integrating sustainable energy technologies into the power grid, and on improving grid components.

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HaE – Heat & Electricity Storage: Materials, Systems, Modelling

The potential of solar and wind energy is closely related to the ability to store electricity. Phasing out nuclear power is only viable if power companies can supply the market with electricity, heat and fuel reliably, cost-effectively and without interruption. If this is to happen, wind and solar power need to form a significant part of the power mix in order to avoid the need to import (grey) energy. This is why the Heat and Electricity Storage: Materials Systems and Modelling SCCER is working on expanding expertise and technology.

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SCCER – FURIES
Shaping the future Swiss electrical infrastructure

Storage
Swiss Competence Centers for Energy Research

SoE – Supply of Electricity

Switzerland wants to compensate for the loss of nuclear power, which will be phased out in the coming years, by boosting renewable energies. The focus is on electricity which can either be produced flexibly or continuously to meet base-load demand. Intensive research has begun in the SCCER SoE with the aim of supplying five to ten per cent of electricity needs by 2050 through deep geothermal energy and increasing the supply-of hydropower by ten per cent, while also improving flexibility and maintaining the necessary infrastructure over the long term.

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SCCER SoE

CREST – Competence Center for Research in Energy, Society and Transition

Addressing the challenges of energy transition in a holistic way requires not only technological innovations, but also many institutional innovations in policy and in the energy markets. Adjustments to the regulatory framework as well as supply- and demand-side incentive mechanisms are the focus of the CREST SCCER in the 'Economy, environment, law, behaviour' action area.

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SCCER CREST

Mobility – Efficient Technologies and Systems for Mobility

In Switzerland, the transport sector accounts for approximately one third of total energy consumption and greenhouse gas emissions. SCCER Mobility is developing the knowledge and technologies essential for the transition from the current fossil fuel based transportation system to a more sustainable one with minimal CO_2 output and primary energy demand as well as virtually zero-pollutant emissions.

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BIOSWEET – Biomass for Swiss Energy Future

Biomass should contribute an additional 100 PJ per year towards fulfilling Switzerland's energy transition by 2050. The main research areas of the SCCER BIOSWEET are the development of sustainable biochemical and thermochemical biomass conversion technologies for gaseous and liquid fuels and the production of renewable electricity from biomass.

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sccer mobility

biosweet
Swiss Competence Center for Energy Research

CTI – Start-up and Entrepreneurship,
R&D Funding, KTT Support

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