Schweizerische Eidgenossenschaft
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Umwelt, Verkehr, Energie und Kommunikation UVEK

Swiss Federal Office of Energy SFOE
Energy Research and Cleantech

SWEET – swiss energy research for the energy transition

Guiding Themes for SWEET Calls 1-2021 and 2-2021

Date: 20 November 2020

SWEET Call 1-2021:

«Living & Working»

New ways of living and working, changed leisure and mobility behaviour, increasing environmental awareness, business models based on new digital technologies, but also a more restrictive regulatory framework, have a significant impact on future energy consumption. Large investors and companies are increasingly aligning their business strategy with sustainability, while car companies are switching from fossil to renewable fuels. The increasing heat load in cities due to climate change and the advancing interconnection of entire districts with regard to mobility and energy require urban and settlement development towards intelligent use of space in urban areas.

In this context, behaviour, social norms, acceptance and changing values of the various actors and market participants play a central role besides technical and regulatory solutions. The aim is to examine how energy supply and distribution can be ensured efficiently and cost-effectively and how energy consumption can be minimized in geographically clearly defined (sub)urban «areas». By coupling the sectors of buildings, mobility and industry and by adapting technology and consumer behaviour, new energy saving potentials should be identified and quantified. In the framework of «living labs», new scientific approaches, methods and technologies are to be implemented, tested and evaluated in demonstrators. The human being as an individual, but also as part of society and the system, is the key element for achieving efficiency goals in the centre of the living labs, which are implemented as «public-private-people» partnerships.

The goal is low-emission, resources-saving and efficient ways of living and working while maintaining and, if possible, increasing the quality of life.

Expected date of publication: Q1 2021

SWEET Call 2-2021:

«Impact of different influencing factors on critical energy infrastructures and on the resilience of the current and future Swiss energy system»

Energy infrastructures such as energy networks for electricity, gas, oil, heating or cooling, as well as dams and power plants form the backbone of our energy supply. Malfunctions can have serious to devastating effects on our energy system and thus also on the economy and society. The safe and reliable operation of the energy infrastructures is therefore crucial for the Energy Strategy 2050. Natural hazards, climate change, human mistakes, poor maintenance and aging, criminal or terrorist activities, but also technical malfunctions, market failure or regional, national and international conflicts pose risks and dangers. This applies in particular to critical energy infrastructures and the associated cascades to other sectors and areas of life.

Operators of critical energy infrastructures and political as well as federal and supervisory authorities should be provided with clear options for action and innovative solutions along the entire chain of risk management in order to be able to plan and operate the critical infrastructures resiliently in the future. Where necessary, the embedding of the Swiss energy system in the European or international environment must be taken into account. Social aspects and the increasing digitization of energy systems are also of particular importance.

Expected date of publication: Q2 2021

Note: *This document is for guidance only and contains preliminary information that is subject to change. Check the SWEET website for the latest information:*

www.bfe.admin.ch/sweet