



Newsletter

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Dear Reader

We are pleased to present the latest SCCER Mobility news to you. This issue communicates major advances and events of our research platform. Enjoy reading!

News & Highlights



Webinar series - fall semester 2019

All video recordings of the talks of the fall semester 2019 are available for viewing on the ETH Video Portal! We would like to thank all the speakers, who participated and shared insights about their ongoing research this semester. We look forward to welcoming you to the next round of webinars in the spring semester 2020. Program details will follow soon!

Read more



SCCER interview with Nicole Aegerter

Nicole Aegerter is a PhD student at the Laboratory of Composite Materials and Adaptive Structures at ETH Zurich. Already during her master's studies, she was hooked by the idea of developing lightweight materials to reduce vehicular energy demand. Nicole is convinced that we will not find a "one fits all solution" for our energy demands, but we rather need to find a balanced mix between social, political and technical measures to tackle the problem.

Read more



SCCER Digitalization Action Plan

Last year, the Swiss Federal Council allocated funding to strengthen research in the field of digitalization for three SCCERs. SCCER Mobility submitted a proposal to Innosuisse and received funding for five projects. Along with building up new research capacity on the topic of digitalization and mobility, SCCER Mobility also welcomes four new research groups to its network.

Read more



Initiative on the Decarbonization of Aviation

The ETH Initiative on the Decarbonization of Aviation is a call for establishing more research at ETH Zurich towards decarbonizing aviation, reducing its dependence on fossil fuels and thus its climate impact. Through an ETH+ proposal the initiative received funding to develop the idea further and specifically delineate how and where ETH Zurich can contribute to decarbonizing aviation by 2050. SCCER Mobility is supporting the coordination of this work.

Read more

More news highlights

Upcoming events

7th Conference of the ETH Conference Series "Aspects of individual Mobility"

This conference runs under the theme of "Fuels from renewable energy – decarbonization of road transport, aviation and shipping – a utopia?" It will take place in German on **30 January 2020** at ETH Zurich. <u>Register now!</u>

SCCER Mobility Annual Conference 2020

Save the date for the 2020 edition of the SCCER Mobility Annual Conference. It will take place on **30 June 2020** at ETH Zurich. More information will follow soon.

More upcoming events

SCCERs



Faktor-3 Forum "Planning and reality – a deviation with consequences?"

Building and area planning are becoming more detailed due to more complex models and computing power. However, how well do plan values coincide with what is implemented? What are the consequences? To shed light on such questions, SCCER FEEB&D is hosting this event on 17 January 2020 in Basel. The event will be held in German and more information is available here.



REGISTER NOW! Dialogue social science meets practice

On **30 January 2020**, the "Dialogue social science meets practice: towards climate-neutral cities" will take place in Basel. Thematic focus is put on heat conversion, energy consumption, making demand more flexible, electric mobility and transformation of life styles. More information is available <u>here</u>.

SCCER Mobility Glossary

This section intends to widen the common ground between all SCCER Mobility partners. Contributions from our members are welcome. To make suggestions for this section, please contact the <u>Management Office</u>.

Joint Activities (JA) are research efforts that overarch the established SCCERs with the goal of strengthening interdisciplinary research between the centers. They initiated in 2017 and received funding until the end of 2020. SCCER Mobility is involved in four of the six funded JAs.

The JA Coherent Energy Demonstrator Assessment (CEDA) aims to coordinate and harmonize SCCER research on various new technologies and devices to store, convert and transmit energy. CEDA deals with both the supply and the demand side of tested energy devices (storage, conversion and transmission). Tackling the supply side entails establishing a common set of operational and performance indicators including economic aspects. On the demand side, CEDA gathers realistic energy usage profiles of vehicles and buildings to generate demand data for entire representative fleets and cities. Read more

The JA **The evolution of mobility:** A socio-economic analysis aims to combine detailed knowledge about technical options and their implications for the energy system with a sound understanding of mobility behavior and its social and economic determinants in a systematic way. This is done threefold by developing approaches to reduce mobility-related household energy demand, generating coherent scenarios for a future Swiss mobility system as well as by conducting field experiments to test the impact of programs that use "soft measures", such as information regarding lifetime costs, policy measures or environmental impacts. Read more

The JA **Scenarios and Modelling** (JASM) aims at providing a set of robust scenarios for the realization of the Swiss Energy Strategy 2050. The modeling groups of all eight SCCERs work together and bring in their respective experience in the field of electricity generation technologies, buildings, mobility, industry, grids, biomass, storage and economy. Read more

The JA White Paper on the Perspectives of Power-to-Product (P2X) Technology in Switzerland gathered state of the art knowledge on P2X technologies and assessed the economic, environmental, regulatory challenges as well as its potential for the Swiss energy market. The outcomes of this study were synthesized in a white paper, which serves as a guide for policy makers to reach the emission and power supply goals of the Swiss Energy Strategy 2050. The corresponding white paper was published in July 2019. Read more

Quiz

Which measure for decarbonizing aviation was perceived as the least feasible during expert interviews in the context of an ETH initiative? The first 10 people to send the correct answer to <u>Pascal Sonder</u> will enter the final drawing and have a chance to win (e-mail subject: QUIZ).

Solution of the previous quiz: the highest efficiency reached by a passenger car gas engine is 45%. The winner was Maximilian Held, ETH Zurich. Congratulations!

This information is provided by the SCCER Mobility Management Office. Our newsletter is issued 4 times per year. If you have information that you would like to share, please contact <u>Kirsten Oswald</u>.

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