



# Mobility Research and Innovation in Switzerland

Thursday, 9 September 2021

Verkehrshaus der Schweiz, Luzern



The Mobility Research Programme of the Swiss Federal Office of Energy kindly invites researchers, innovators and entrepreneurs in the field of transport and mobility to a one-day workshop at the Verkehrshaus Luzern. The defossilisation of the transport sector - the largest CO<sub>2</sub> emitter in Switzerland - is one of the major challenges to reach net-zero in 2050. The aim of the workshop is to discuss viable routes to an energy efficient and emission free transport system within the paradigm of *avoid - shift - improve*. The focus is on technical innovations and socio-economic measures to accelerate the transition to environmentally friendly and energy-efficient mobility.

The workshop programme is designed to provide ample time for discussions and networking in small groups, and to deliver a platform for future collaborations.

## Workshop programme

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| 08.15–09.15 | Registration, coffee, networking, posters, museum  |
| 09.15–10.30 | 1 <sup>st</sup> plenary session<br>M. Bütikofer: “Mobility and energy: past – future”<br>K. Axhausen: “Future mobility and the CSFM at ETH Zürich”<br>N. Mathys: “Beyond the Swiss transport outlook 2040”<br>C. Schreyer: “The regulatory framework in Switzerland and the European Union”                                |
| 10.45–12.00 | Thematic sessions 1 (parallel)   |
| 12.00–14.00 | Lunch & poster session   |
| 14.00–15.30 | Thematic sessions 2 (parallel)<br>Coffee break   |
| 16.00–17.30 | 2 <sup>nd</sup> plenary session<br>A. Vezzini: “Pathways to a net-zero CO <sub>2</sub> Swiss mobility”<br>M. Gysler: “The Energy Perspectives 2050+”<br>M. Kubli: “User preferences for smart EV charging”<br>U. Hahnel: “Sustainable decision-making and mobility behaviour”<br>L. Castiglioni: “SFOE funding programmes” |



### Thematic sessions

	Conference Hall (Coronado)	Seminar Room (DC3)
10:45 - 12:00	<b>Mobility behaviour, incentives and economics</b> Chair: Anne-Kathrin Faust, SFOE	<b>Transport systems, freight logistics, digitalization</b> Chair: Andreas Kronawitter, its-ch
	<b>Davide Cerruti</b> , ETH Zürich “The Impact of Policy Awareness: Evidence from Vehicle Choices Response to Fiscal Incentives”	<b>Nicoletta Brazzola</b> , ETH Zürich “Flying to the future: definitions and implications of climate-neutral aviation”
	<b>Raphael Hoerler</b> , ZHAW “Would you be better off switching to a sustainable mobility lifestyle partly based on electric mobility?”	<b>Marco Piffaretti</b> , Mobility “V2X at Mobility CarSharing”
	<b>Hugo Caviola</b> , Universität Bern “Mobility: a consumer good, traffic: a force of nature”	<b>Bessie Noll</b> , ETH Zürich “Projecting technology competition for low-carbon road-freight in Switzerland”
	<b>Beat Hintermann</b> , Universität Basel “Pigovian Transport Pricing: A Field Experiment”	<b>Loan Betend</b> , HEIA-FR “Road infrastructure digitalization for automated vehicles”
	<b>Uros Tomic</b> , ZHAW “How to incentivise the user-based redistribution in free-floating carsharing? The evidence from Switzerland.*”	

14:00	<b>Bjarne Steffen</b> , ETH Zürich “Comparing the levelized cost of electric vehicle charging options in Switzerland and Europe”	-
14:20	<b>Ramachandran Kannan</b> , PSI “What does the net-zero emission goal imply for the Swiss transportation sector?”	-
	Conference Hall (Coronado)	Seminar Room (DC3)
14:45 - 15:30	<b>Mobility within the energy system: V2X, Synfuels</b> Chair: Roman Rudel, SUPSI	<b>Technical progress: alternative drives and optimization</b> Chair: Christian Bach, Empa
	<b>Tobias Schmidt</b> , ETH Zürich “How much vehicle-to-grid is feasible without compromising EV warranties?”	<b>Andyn Omanovic</b> , Empa “Progress in Internal Combustion Engines for Efficient and Flexible Drive Trains of Mobility”
	<b>Stephan Renz</b> , Renz Consulting “Synthetic fuels for Switzerland”	<b>Hubert Girault</b> , EPFL “Hydrogen Mobility”
	<b>Anton Sentic</b> , ZHAW “V2G pathways”	<b>Philippe Zimmermann</b> , Empa “Prediction of the real world consumption values for heavy-duty vehicles with different propulsion technologies”



### Plenary Speakers

Martin Bütikofer	Director, Verkehrshaus Luzern
Kay Axhausen:	Professor of transportation planning, ETH Zürich
Nicole Mathys	Head fundamental policy questions, ARE
Christoph Schreyer:	Head energy-efficient transport, SFOE
Andrea Vezzini:	Professor for industrial electronics, BFH
Matthias Gysler:	Chief economist, SFOE
Merla Kubli	Assistant professor of managing climate solutions, HSG
Ulf Hahnel	Senior researcher, Université de Genève
Luca Castiglioni	Head mobility research, SFOE



### Evening programme

18.00-20.45	Sunset cruise with apéro riche on steamboat Gallia
18:15	Departure at “Verkehrshaus Luzern”
20:15	Arrival at “KKL / Luzern main station”



### Workshop contributions

Upon registration, please indicate if you wish to present a **short talk** (15 min) or a **poster**, and which thematic sessions you would prefer.

The **abstract submission deadline is 25 August 2021**.

Templates and instructions can be found on the Mobility Research Programme website:

<https://www.bfe.admin.ch/bfe/en/home/research-and-cleantech/research-programmes/mobility.html>

### Fees

Workshop & lunch:	40.-	students (incl. PhD students)
	80.-	university researchers, postdocs, professors
	120.-	private companies & others

Evening programme: 50.-

### Registration

Please register directly online: <https://www.bfeevents.admin.ch/en/external-events/event-detail/148>

The **registration deadline is 25 August 2021**.

Please make sure to transfer the full workshop fees in due time to the following account:

Bundesamt für Energie BFE	
3003 Bern	
IBAN:	CH55 0900 0000 3051 9481 5
Institution:	PostFinance AG
Notice:	Mobility: <i>LastName, FirstName</i>

### Organisation

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### Workshop secretary

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