

SUSTAINABLE TRANSPORTATION ENERGY PATHWAYS

An Institute of Transportation Studies Program

STEPS SYMPOSIUM -- SPRING 2016

June 1 and 2, 2016

June 1: 8:15 a.m. – 5:00 p.m. and evening reception
June 2: 8:15 a.m. – 12:30 p.m.
UC Davis Conference Center

The STEPS team will present research results from 2015 and progress on 2016 projects and host sessions on **peak oil, sustainable trucking, new mobility and connected and autonomous vehicles, ZEVs in California vs. China, and transition cost scenarios for the U.S. and California.**

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Event Files:

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Day 1: Wednesday, June 1, 2016

California Air Resources Board (15 min) NG/RNG work to date: Rosa Dominguez-Faus, Postdoctoral Researcher, ITS-Davis (min) Truck and fleet analysis: Chris Yang, Research Scientist, ITS-Davis; Marshall Miller, Research Engineer, ITS-Davis (15 min) Networking Lunch and Poster Review 1:15 pm Poster Session STEPS team members and affiliates share research progress. Coffee available 2:30 pm Keynote: Travel, Energy and Carbon Impacts of Highly Automated Vehicles Paul Leiby, Group Leader, Energy Analysis Group, Oak Ridge National Laboratory 3:15 pm Session 3 Panel Discussion on Major User Impacts: Shared Mobility and Connected and Automated Vehicles Facilitator: Dan Sperling, Director, ITS-Davis		Continental breakfast				
9:30 am Session 1 - Global Peak Oil Demand and EV Projections Peak oil demand: Amy Jaffe, Exec. Dir., Energy & Sustainability, UC Davis; Daniel Schietrum, PhD Candidate, UC Davis (20 min) PEV transitions: Gil Tal, Researcher, ITS-Davis PH&EV Center (20 min) Potential for low carbon vehicles around the world: Lew Fulton (20 min) Coffee available 11:00 am Session 2 - Sustainable Trucking/Freight California Air Resources Board (15 min) NG/RNG work to date: Rosa Dominguez-Faus, Postdoctoral Researcher, ITS-Davis (min) Truck and fleet analysis: Chris Yang, Research Scientist, ITS-Davis; Marshall Miller, Research Engineer, ITS-Davis (15 min) 12:15 pm Networking Lunch and Poster Review Poster Session STEPS team members and affiliates share research progress. Coffee available Keynote: Travel, Energy and Carbon Impacts of Highly Automated Vehicles Paul Leiby, Group Leader, Energy Analysis Group, Oak Ridge National Laboratory 3:15 pm Session 3 Panel Discussion on Major User Impacts: Shared Mobility and Connected and Automated Vehicles Facilitator: Dan Sperling, Director, ITS-Davis	3:30 am	Welcome and Introduction: Lew Fulton, Director, STEPS Program, ITS-Davis				
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Automated Vehicles Facilitator: Dan Sperling, Director, ITS-Davis	2:30 pm					
 Panelists: Future mobility & big data: Regina Clewlow, Director of Business Development & Strategy, moovel Analyzing Automation: Caroline Rodier, Associate Director, ULTRANS Auto OEM perspective: Mary Beth Stanek, Director, Advanced Technology and Government Relations, GM Autonomous vehicle impacts: Paul Leiby, ORNL Group discussion 	3:15 pm	Automated Vehicles Facilitator: Dan Sperling, Director, ITS-Davis Panelists: • Future mobility & big data: Regina Clewlow, Director of Business Development & Strategy, moovel • Analyzing Automation: Caroline Rodier, Associate Director, ULTRANS • Auto OEM perspective: Mary Beth Stanek, Director, Advanced Technology and Government Relations, GM • Autonomous vehicle impacts: Paul Leiby, ORNL				
4:45 pm Wrap up	4:45 pm	Wrap up				
5:15 pm Reception at Our House Restaurant, 808 2nd St, Davis, CA 95616	5:15 pm	Reception at Our House Restaurant, 808 2nd St, Davis, CA 95616				

Day 2: Thursday, June 2, 2016

8:15 am	Continental Breakfast
8:30 am	 Keynotes and Panel: China and California: ZEV Market Growth and Policies Alberto Ayala, Deputy Executive Officer, ARB (20 min) Yunshi Wang, Director, China Center for Energy and Transportation, ITS-Davis (20 min) Panelists: Andy Swanton, Director of Business Development, BYD Simon Mui, Director, California Vehicles and Fuels, NRDC
10:00 am	Session 4 – Scenario and cost modeling for the US and California – presentation and discussions U.S. Transition Costs and Scenario modeling: Joan Ogden, Lew Fulton (20 min) California transition models: Chris Yang, Marshall Miller (20 min) Coffee available
11:00 am	 Session 5 – Breakout Group Discussions on STEPS 2016 research areas Topics (two 25-minute rounds) Cost Scenarios: Joan Ogden, Lew Fulton Peak oil demand: Amy Jaffe, Daniel Scheitrum Trucks/freight: Marshall Miller, Miguel Jaller, Chris Yang PEV markets: Tom Turrentine, Gil Tal, Mike Nicholas Hydrogen: Chris Yang, Mike Nicholas Emerging revolutions (e.g., CAVs, shared mobility)/Black Swans: Dan Sperling, Caroline Rodier, Susie Pike Consumers: Ken Kurani, Gil Tal, Nicolette Caperello Groups Report Out (30 min)
12:30 pm	Lunch and adjourn

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Sustainable Transportation Energy Pathways Program (STEPS) www.steps.ucdavis.edu

STEPS is the major multidisciplinary research consortium within the Institute of Transportation Studies at the University of California, Davis. The consortium is comprised of 40+ PhD-level faculty and researchers and graduate students from UC Davis, 25+ industry and governmental partners, and 20+ outside expert organizations. Our mission encompasses:

- Research: generate new insights and tools to understand the transitions to a sustainable transportation energy future for California, the US and the world,
- Outreach: disseminate valued knowledge and tools to industry, government, the environmental NGO community, and the general public to enhance societal, investment, and policy decision making,
- Education: train the next generation of transportation and energy leaders and experts.

The STEPS 2015-2018 program is generously supported by these sponsors:

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- Government: California Air Resources Board, California Energy Commission, Caltrans, South Coast AQMD, U.S. DOE, U.S. DOT, U.S. EPA
- NGO: FIA Foundation

Our program areas and overarching research questions are:

- **Initiating Transitions 2015-2030:** What is required for early alternative fuel/vehicle transitions to succeed?
- The Future of the Fuels and the Oil & Gas Industry: How will changing geopolitical landscapes and disruptive technology in the oil and gas and clean technology industry impact future business models and the competition of fuels?
- Global Urban Sustainable Transport (GUSTo): How will a rapidly urbanizing world affect demand for transport and energy? How can we transition to sustainable transportation in a rapidly urbanizing world with ever-growing need for mobility?
- Modeling Analysis, Verification, Regulatory and International Comparisons (MAVRIC): What do
 improved and cross-compared economic/environmental/ transportation/energy models tell us
 about the future of sustainable transportation?

What is the Sustainable Transportation Energy Pathways program?



Why sponsors value the UC Davis STEPS program:



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