UC DAVIS
Institute of Transportation Studies

19th Biennial Conference on Transportation & Climate Policy

2023 **PROGRAM**

Navigating to Net-Zero Carbon, and a Secure, Equitable Transportation Future

The 19th Biennial Conference on Transportation and Climate Policy is organized under the auspices of the Energy and Alternative Fuels Committees of the U.S. Transportation Research Board

Hosted by: UC Davis Institute of Transportation Studies

Agenda

TUESDAY, JULY 11, 2023

Please be sure to have your name badge on at ALL times

3:00PM – 6:00pm	Registration	
4:30PM – 6:00pm	Welcome Reception sponsored by Alliance for Automotive Innovation	
6:00PM – 10:00pm	BBQ Dinner & Bonfire	Meadowview

WEDNESDAY, JULY 12, 2023

7:00am – 9:00am	Breakfast	Crocker Hall
9:00am – 12:00pm	Session 1 & 2: It's Crunch Time: California, US, EU, and Chinese Leadership	Merrill Hall
12:00pm – 2:00pm	Lunch *(food available from 12 - 1pm only)*	Crocker Hall/Meadow
2:00pm – 3:15pm	Session 3: Accelerating "Secure" Energy and Battery Investments	Merrill Hall
3:15pm – 3:45pm	Break	
3:45pm – 5:45pm	Session 4: Car and Truck Policy	Merrill Hall
6:00pm – 7:00pm	Dinner	Crocker Hall
7:00pm – 10:30pm	Monterey Bay Aquarium sponsored by Mercedes-Benz *See the next page for bus schedules to the aquarium.*	Crocker Hall

THURSDAY, JULY 13, 2023

7:00am – 9:00am	Breakfast	Crocker Hall
9:00am – 10:30am	Session 5: Beyond Cars – Expanding Mobility for All	Merrill Hall
10:30am – 11:00am	Break	
11:00am – 12:00pm	Session 6: Low-Carbon Fuels for Planes, Ships, and Legacy Vehicles	Merrill Hall
12:00pm – 2:00pm	Lunch *(food available from 12 - 1pm only)*	Crocker Hall/ Meadowview
2:00pm – 4:00pm	Session 7: Vehicle Charging and Hydrogen – Focusing on Trucks	
4:00pm – 4:30pm	Break	
4:30pm – 6:00pm	Closing Panel: Looking Forward	Merrill Hall
6:00pm – 10:00pm	BBQ Dinner and Bonfire	Meadowview

ASILOMAR 2023

MONTEREY BAY AQUARIUM RECEPTION INFORMATION

Due to the large number of participants, all attendees have been separated into two groups. Check your name badge to verify which group you are in as the departure times are different for each group.

WEDNESDAY, JULY 12, 2023

6:00 PM -7:00 PM	Dinner at Crocker Hall
7:00 PM - 10:30 PM	**Monterey Bay Aquarium Reception**

Depart Schedule (3 buses) - *Please reference your name badge for departure time	
7:00 PM	**GROUP 1** Departs from Crocker Hall to Aquarium
7:40 PM	**GROUP 2** Departs from Crocker Hall to Aquarium
10:00 PM	**GROUP 1** Departs from Aquarium to Crocker
10:30 PM	**GROUP 2** Departs from Aquarium to Crocker

About the Sessions

This year's conference will address the challenge of climate change in the context of environmental andmobility justice, how they influence transportation investments and choices, and the policies foraccomplishing these changes in a sustainable manner.

We are at a pivotal point, with novel technologies and business models revolutionizing transportation, and major governmental investments in infrastructure being considered. The conference will focus on national policy, with links to international and state/local policymaking. Key topics include electrification and use of hydrogen and biofuels; new mobility and transit; freight; and the role of cities in these transitions.

WEDNESDAY

9:00 AM – 12:00 PM | MERRILL HALL

SESSION 1 & 2: It's Crunch Time: California, US, EU, and Chinese Leadership

Navigating to net-zero carbon will not be easy, but perhaps easier for land-based transportation than any other major sector or activity. This session will review the status of low-carbon transportation policies and initiatives around the world with a focus on China, Europe, and California. We will assess how these political entities are proceeding, and reflect on the implications for the US. This session will address decarbonization and EV markets around the world, geopolitics and protectionism, and policy in key regions, with special attention to scalability and supply of minerals, batteries, and fuels.

Welcome:

Daniel Sperling, *Founding Director, Institute of Transportation Studies, UC Davis*

Speakers:

Gzim Ocakoglu, *First Counsellor, Mobility & Transport, Delegation of the E.U. to the U.S.*

Yunshi Wang, *Director, China Center for Energy and Transportation, ITS-Davis*

Liane Randolph, *Chair, California Air Resources Board*

Sunita Satyapal, *Director, Hydrogen and Fuel Cell Technologies Office, DOE*

Margo Oge, *Former Director, US EPA Office of Transportation and Air Quality (OTAQ), United States Environmental Protection Agency*

David G. Victor, *Professor of Innovation and Public Policy, UC San Diego*

WEDNESDAY

2:00 PM – 3:15 PM | MERRILL HALL

SESSION 3: Accelerating "Secure" Energy and Battery Investments

The low-carbon transition requires a massive increase in the global supply of lithium and other materials, as well as massive investments in batteries, vehicles, and renewable electricity. Investments in mines, charging stations, recycling facilities, and other energy facilities are slowed by concerns over impacts on the local environment, indigenous populations, and disadvantaged communities. What will be the effect on battery and vehicle costs, and what can or should be done about it?

Moderator: Aditya Ramji, *Director, India ZEV Research Centre, ITS-Davis*

Speakers:

Aimee Boulanger, *Executive Director, Initiative for Responsible Mining Assurance*

Alissa Kendall, *Professor, Civil & Environmental Engineering, UC Davis*

Jennifer Krill, *Executive Director, Earthworks*

3:45 PM – 5:45 PM | MERRILL HALL

SESSION 4: Car and Truck Policy

What regulations, incentives, and subsidies would be most effective and implementable for accelerating low-carbon vehicles? How might battery size (and demand for critical materials) be constrained? Consumers are conservative, battery costs have been rising, and fuel infrastructure is expensive. Most forecasts find that the total cost of ownership of EVs will soon be competitive in many applications, but will that be true? And even if it is, research suggests that individuals and fleets will be slow to adopt.

Moderator: Richard Corey, *Partner, AJW*

Speakers:

Karl Simon, *Director, Transportation and Climate Division at US EPA*

Sydney Vergis, *Deputy Executive Director, California Air Resources Board*

Panelists:

Nancy Ryan, *Partner, eMobility Advisors*

Steve Henderson, *Associate Director, Vehicle Regulatory Strategy & Planning, Ford Motor Company*

Francesca Wahl, *EV Charging Policy, Tesla*

6:00 PM – 7:00 PM | CROCKER HALL / MEADOW

Dinner

7:00 PM – 10:30 PM | BUSES DEPART FROM CROCKER HALL

Monterey Bay Aquarium Reception

THURSDAY

9:00 AM – 10:30 AM | MERRILL HALL

SESSION 5: Beyond Cars – Expanding Mobility for All

Are we headed toward urban sustainability, or not–considering economics, environment, and equity? Car travel has not been decreasing. Are we permanently wedded to car-centric travel? What progress have we made in improving accessibility for marginalized and disadvantaged travelers? What are the opportunities to improve accessibility, including infill and affordable housing, while also reducing GHG emissions? What lessons can be learned from elsewhere- especially European cities?

Moderator: **Susan Handy**, *Director, National Center for Sustainable Transportation*

Case Studies:

Courtney Sung, *Director of Strategy and Business Development, Via*

Gloria Huerta, *CEO, Miocar*

Thomas Matagne, *Founder of Ecov*

Brandon Pollak, *Executive Director, Washington Mobility Innovation District*

Policy Opportunities:

Megan W. Blum, *Director, Office of Environmental Programs, Federal Transit Administration*

Adonia Lugo, *Equity Research Manager, UCLA Institute of Transportation Studies*

Darwin Moosavi, *Deputy Secretary for Environmental Policy & Housing Coordination,California State Transportation Agency*

11:00 AM – 12:00 PM | MERRILL HALL

SESSION 6: Low-carbon fuels for planes, ships, and legacy vehicles

Large quantities of low-carbon fuels will be needed for aviation and maritime, and possibly long haul trucks, though California will not allow any combustion engines for trucks. Contenders are hydrogen, now boosted by the US Regional Clean Hydrogen Hubs (H2Hubs) program, SAF, biofuels, and e-fuels. These fuels can be produced in many ways from many different feedstocks. Should they be allowed in trucks? What new policies and investments are needed, and by whom?

Moderator: **Rebecca Dodder**, *US Environmental Protection Agency*

Speakers:

Colin Murphy, *Deputy Director, Policy Institute for Energy, Environment, and the Economy, UC Davis*

Panelists:

Michael Traver, *Senior Researcher, Transport Technologies Division, Aramco Research Center*

Erin Cooke, *Sustainability + Environmental Policy Director, San Francisco International Airport*

THURSDAY

2:00 PM – 4:00 PM | MERRILL HALL

SESSION 7: Vehicle Charging and Hydrogen – Focusing on Trucks

A massive number of public (and private) chargers are needed to support rapid expansion of truck electrification, and a large number of hydrogen stations will also be needed for long haul trucks and perhaps others. These chargers will require substantial land and huge amounts of electricity–similar to small cities for the larger stations. The business challenge for chargers is especially daunting. Are the US federal incentives (IRA) enough to assure establishment of a reliable, accessible charging system–and encourage vehicle sales? What more needs to be done to build these stations in a timely manner? How can concerns of local communities be accommodated?

Moderator:
Lew Fulton, *Director, STEPS, ITS-Davis*

Speaker:

Michael Berube, *Deputy Assistant Secretary for Sustainable Transportation, Department of Energy*

Patty Monahan, *Commissioner, California Energy Commission*

Panelists:

Rakesh Aneja, *Head of eMobility, Daimler Trucks North America*

Paul Rosa, *SVP Procurement & Fleet Planning, Penske Truck Leasing*

Carla Peterman, *Executive Vice President, Corporate Affairs and Chief Sustainability Officer, PG&E*

Román Partida-López, *Transportation Equity Legal Counsel at The Greenlining Institute*

Janice Lin, *Founder and President, Green Hydrogen Coalition*

Katie Ellet, *President, Hydrogen Energy and Mobility, NAM at Air Liquide*

4:30 PM – 6:00 PM | MERRILL HALL

Closing Panel: Looking forward

Moderator: Roland Hwang, *Program Director, Climate and Clean Energy Program, Heising-Simons Foundation*

Panelists:

Rachel Nealer, *Deputy Director for Joint Office of Energy and Transportation*

Alejandra Nunez, *Deputy Assistant Administrator for Mobile Sources, Office of Air and Radiation, U.S. Environmental Protection Agency*

Rajinder Sahota, *Deputy Executive Officer, California Air Resources Board*

Robert Spicer, *Head of Transport & Future Mobility, BP*

6:00 PM – 10:00 PM | MEADOW

BBQ Dinner & Bonfire

2023 Asilomar Steering Committee

Dan Sperling (Chair), *University of California, Davis*

John Boesel, *Calstart*

Pierpaolo Cazzola, *University of California, Davis*

Giovanni Circella, *Ghent University and University of California, Davis*

Rebecca Dodder, *US Environmental Protection Agency*

Anthony Eggert, *ClimateWorks Foundation*

Dawn Fenton, *Volvo Group North America*

Mark Finley, *Rice University*

Lew Fulton, *University of California, Davis*

Katherine Garcia, *Sierra Club*

David Greene, *University of Tennessee, Knoxville*

Susan Handy, *University of California, Davis*

Marianne Hatzopoulou, *University of Toronto, TRB chair of AQ/Climate Committee*

Tim Lipman, *University of California, Berkeley*

Britney McCoy, *US Environmental Protection Agency*

Patty Monahan, *California Energy Commission*

Rachael Nealer, *US Department of Energy, TRB chair of Alternative Fuels Committee*

Nick Nigro, *Atlas Public Policy*

Julia Rege, *Mercedes-Benz*

Thiemo Schalk, *BMW*

Gil Tal, *University of California, Davis*

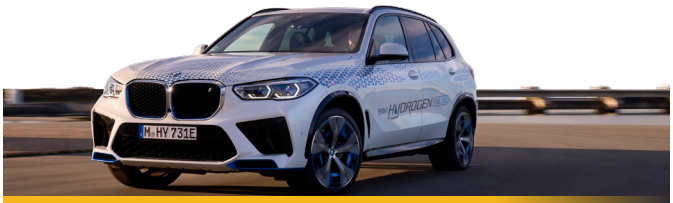
Terry Travis, *EVNoire*

Sean Waters, *Daimler Truck*

Christoph Wolff, *Smart Freight Centre; ITS-Davis European Transport and Energy Research Centre*

2023 Ride and Drives

WEDNESDAY, JULY 12th



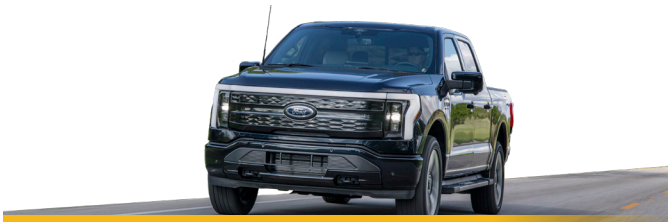
BMW iX5

The BMW iX5 Hydrogen is an alternative energy variant of the fourth-gen BMW X5 (BMW G05). Utilizing hydrogen fuel, this fuel cell test vehicle has a system output of 295 kW (395 hp) & WLTP range of 504 km (313 miles), and can be refilled in 5 minutes.

TOYOTA MIRAI

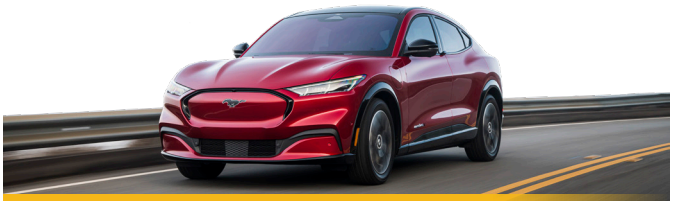
Using fuel cell technology, the Mirai combines hydrogen with the air to make its own electricity. This second-generation Mirai brings an engaging driving performance with rear-wheel-drive and a range of 402 EPA-estimated miles on the Mirai XLE grade.

THURSDAY, JULY 13th



FORD F-150 Lightning

The F-150 Lightning brings stunning innovation, technologies and capabilities to the F-Series, America's best-selling truck, combined with the power, payload and towing capability that is the hallmark of all Built Ford Tough trucks.

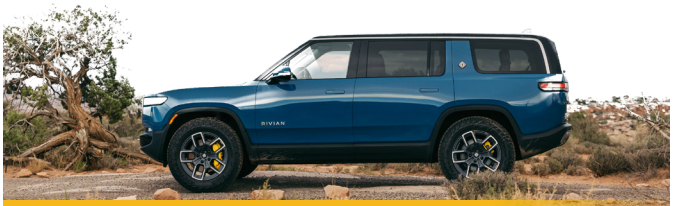


FORD Mustang Mach-E

The all-electric Mustang Mach-E brings the 0-60 mph thrills Mustang is famous for, in a sleek new package brimming with the latest technology and over-the-air Ford Power-Up software updates.

AMAZON Delivery E-Truck

A product of Amazon's partnership with Rivian, these custom-made vehicles feature first-of-its-kind embedded technology that fully integrates the delivery workflow with the vehicle, enabling seamless access to routing, navigation, driver support and more.



RIVIAN R1S

With a 7-seat capacity, ample storage room, up to 390 mi per charge and 835 horsepower, the all-electric Rivian R1S is ready for all your family's needs, whether on or off the road.

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