

# Electric Vehicles: Global technology, market, and policy trends

26 August 2016 – ME Lecture Hall – 1300

## Guest Lecturer Dr. Nic Lutsey

Program Director, Electric Vehicle, Heavy-duty Vehicle, and Fuels Work / Co-Lead of US Activities, International Council on Clean Transportation

### Abstract:

In late 2015, the automobile industry hit a major milestone: the one millionth plug-in electric vehicle took to the road somewhere in the world. The industry continues to make bold announcements about battery technology improvements and new electric vehicle models with cost, range, and performance improvements. These advances in new electric vehicle technology hold the promise of expanding the market well beyond early adopters. This presentation provides an assessment of global technology trends on electric vehicle technology, including discussion of recently announced, upcoming electric vehicles. In addition, the presentation reports on analysis to understand the underlying factors that are driving electric vehicle uptake around the world, focused on the growth in the leading markets of China, Europe, and the United States. The survey of global markets includes a summary of supporting policies (e.g., regulation, incentives) and other government support (e.g., public charging infrastructure) that are in place to promote electric vehicles in the major markets. Finally, the seminar will include a discussion of the challenges of transitioning to an electric vehicle fleet over the longer-term and possible keys to overcome those challenges.

### Biography:

Dr. Nic Lutsey directs the International Council on Clean Transportation's electric vehicle, heavy-duty vehicle, and fuels programs and co-leads its work in the United States. Nic manages the ICCT's role as the secretariat for the International Zero-Emission Vehicle Alliance. He has co-authored 19 peer-reviewed journal articles and dozens of reports on technology potential, regulatory design, industry compliance, and cost-effectiveness for vehicles and alternative fuels. Previously, with the California Air Resources Board, he participated in the regulatory development and technical analyses toward the 2004 and 2012 adoption of greenhouse gas emission regulations for automobiles. He has received awards from the U.S. Department of Transportation, the University of California at Davis, the Transportation Research Board, the California Air Resources Board, and SAE International for his research contributions. He received a B.S. in Agricultural and Biological Engineering from Cornell University and a Ph.D. in Transportation Technology and Policy from the University of California, Davis.



Dr. Nic Lutsey

