U.S. DEPARTMENT OF ENERGY

Office of **ENERGY EFFICIENCY & RENEWABLE ENERGY**

Vehicle Technologies Office Newsletter

Director's Corner

There are a lot of exciting things coming out of VTO in the recent and coming months. We are very proud to have recently announced project selections for research that will advance batteries and electrification to enable extreme fast charging, in addition to our FY18 Advanced Vehicle Technologies FOA that covers six technology areas.

At our upcoming Annual Merit Review, researchers will share updates on the progress made on many of our projects that are already underway. This is sure to be an engaging event and we hope to see many of you there!

-Michael Berube, VTO Director

Register Now: 2018 Annual Merit Review

When: June 18-21, 2018 Where: Crystal Gateway Marriott in Arlington, VA www.energy.gov/eere/vehicles/annual-merit-review

Meet the Team:

Steven Boyd



The Vehicle

Technologies Office's Batteries and Electrification Program Manager, Steven Boyd began his career in vehicle technologies as a student participating in the DOE Advanced Vehicle Technology Competitions. He recently had the exciting opportunity to share his knowledge of electrification technologies while discussing the Bat mobile at Awesome Con in Washington DC. Read more about Steven in our recent interview.

Office Highlights

Energy Secretary Announces \$68.5 Million for Advanced Vehicle Technologies Research

U.S. Secretary of Energy Rick Perry announced up to \$68.5 million in available funding for early-stage research of advanced vehicle technologies that will enable more affordable mobility, strengthen domestic energy security, and enhance U.S. economic growth.

"Transportation is fundamental to the American way of life," said Secretary Perry. "Investing in early-stage research of advanced transportation technologies can give families and businesses greater choice in how they meet their mobility needs while reducing energy costs and making our transportation more efficient and reliable." Read more about DOE's Announcement.

DOE Invests \$19 Million in Batteries & Electrification to Enable Extreme Fast Charging

The Energy Department announced \$19 million to support twelve new costshared research projects focused on batteries and vehicle electrification

technologies to enable extreme fast charging. Selected research projects are focused on developing electric vehicle systems that can recharge rapidly at high power levels, decreasing typical charge times to 15 minutes or less using a connector or wireless fast charging.



Secretary Perry visiting Idaho National Laboratory's Battery Research Lab

The nine selected battery projects focus on advanced anodes, electrolytes, and battery cell designs that can be charged rapidly - in less than 10 minutes - while still maintaining performance over the 10 year life goal. The three selected electrification projects will develop and verify electric drive systems and infrastructure for electric vehicle extreme fast charging, which increases charging power levels from current home charging at 7 kW to power levels up to 400 kW, and reduces typical charging times from 8 hours to 15 minutes or less. Read more about DOE's selections.

EcoCAR 3 - Year 4 Final Competition

EcoCAR 3 is in its final year with teams racing towards the finish line. All 16 university teams will head to Yuma, AZ, May 10 to begin the final round of vehicle testing for the EcoCAR 3 competition. Following a week of dynamic testing at General Motors' proving grounds, students will head to the Los Angeles area for final presentations, a ride & drive, and the final awards. Keep up on the final year of competition by following EcoCAR 3 on Facebook and Twitter.

VTO Webinars

EVI-Pro Lite Webinar

EVI-Pro Lite, built from the more robust Electric Vehicle Infrastructure Project Tool (EVI-Pro), can help evaluate existing electric vehicle charging infrastructure and determine future needs based on demand. Using data from personal vehicle travel patterns, electric vehicle attributes, and charging station characteristics, the tool projects demand for charging infrastructure by state or city/urban area.

EVI-Pro Lite was developed by VTO in collaboration with the California Energy Commission and National Renewable Energy Laboratory. To learn more, attend an upcoming webinar about the tool scheduled for Monday, May 21 at 3 p.m. - 4:30 p.m. Eastern Time. Register now.

Presenters will include:

- Bud Braughton, an engineer with the City of Columbus, will discuss how Columbus has used the detailed planning study developed by NREL.
- Rachael Nealer, an analysis program manager within VTO, will discuss how EVI-٠ Pro supports ongoing analysis at DOE.



Commercial GPS dataset (developed by INRIX) from Columbus, OH used to characterize daily travel patterns used in EVI Pro

Reports and Publications

Find more on VTO's Report & Publications page.

Annual Progress Reports: Fiscal Year 2017

Each year, the Vehicle Technologies Office produces annual reports for each of its subprogram areas of research. These reports highlight technology improvements and other progress made towards reaching the individual subprogram's goals. The annual reports also show how these accomplishments fit into the broader context of supporting VTO's mission.

- Advanced Combustion Systems & Fuels FY2017 APR
- Analysis FY2017 APR
- Batteries FY2017 APR
- Energy Efficient Mobility Systems FY2017 APR
- Electrification FY2017 APR
- Materials FY2017 APR
- Technology Integration FY2017 APR



