rEV
the electrifying education experience

“Educating the next generation of drivers is critical to speeding up our nation’s transition to a sustainable future. Misunderstanding the benefits of EVs, from reduced carbon emissions and improved local air quality to fuel and maintenance cost savings, remains a key barrier to more widespread EV adoption.”

– Lisa Wood, Vice President of Customer Solutions at Edison Electric Institute
According to the International Energy Agency, more than three times as many electric vehicles (EVs) were registered in the U.S. in 2021 than in 2016. Students currently learning to drive are statistically more and more likely to drive electric cars.

The National Energy Foundation’s educational approach includes teaching students about the fuel mix in their areas. This is a great way to connect the dots from resource to behavior. Knowing the electrical generation of energy used when they plug in an electric vehicle will help students make energy aware choices.

Excerpt from our 2018 National Energy Literacy Survey blog series.

rEV is an electric vehicle education program for middle school and high school students. It originates from discussions with industry professionals in energy and transportation manufacturing. The main components are the rEV Interactive Experience, the rEV Share Form and the rEV Challenge. After the program, students and their families will understand the economic, environmental and societal benefits of EVs.

Excerpt from the Transportation Electrification: Utility Fleets Leading the Charge report.
To date:

- 45 states have EV purchasing incentives
- 15 states have adopted low-emission vehicle (LEV) and zero emission vehicle (ZEV) standards, with many others working through the process

*EEI Improving the Customer EV Experience: Education & Outreach*

The more than $1.26 billion in approved state regulatory filings related to electric transportation to date is directing more than $18 million toward education and outreach activities.

*EEI Improving the Customer EV Experience: Education & Outreach*

As more types of EVs are introduced to the market and people make the shift from ICE to EV, adoption rates should accelerate as word of mouth and marketing create more awareness. Also, once drivers experience the EV lifestyle, it’s difficult to not talk about how great it is, and many of our EV customers become fully committed to electrification.

*Kelly Helfrich, Electric Vehicle Grid Integration and Strategy Manager at General Motors*

Rise of the Modern EV
rEV Share Form

The rEV Share Form allows students and their families to share their thoughts and opinions on EVs with program sponsors.

Interact Experience

The rEV Interactive Experience, a choose your adventure film, allows students to envision themselves or their families owning and driving an electric vehicle.

Classroom Activity

Power Fuel: This activity compares the energy efficiency and environmental benefits of different types of vehicles based on vehicle data and driving habits.
The rEV Challenge gives students the opportunity to act as ambassadors for EVs by creating a video that describes the benefits to their friends. The winning student and teacher are each awarded an electric bike!

Teacher Resources

- Next Generation Science Standard Correlations
- Smart grid and electrical generation video lessons
- Class lesson plans with discussion questions, activities and worksheets
- STEM and Workforce curriculum content
Launch of rEV

65% of students have a more favorable attitude toward EVs.

85% of students know more about EVs than they did before.

36% of students are curious to find EV charging in their area.

11% increase in students who intend to purchase an EV.

The teachers' responses made my day. The first teacher said one student is typically not engaged but took the rEV Challenge very seriously. Just that one student going from not engaged to completely engaged is what every teacher hopes for, to make a difference in just one student at a time. rEV has done this in our schools. Within days of program delivery, the teachers asked if we could sponsor again next year."

Loved the presentation so informative and helped me better understand vehicles more.

502 SCHOOLS

Utility Program Sponsor
“I just wanted to reach out and let you know that my students and I really enjoyed the rEV website, the interactive video, the music, and the games. As well, I really enjoyed the teacher resources. I have taken some of them and am creating a unit that will go a little further. Thanks for the time and the $100 that I will spend for my classroom, too!”

“I have always been interested in the way our environment works and I find it amazing how we can now drive these electric cars to go everywhere and anywhere. I hope that one day everyone can see the benefits of electric cars and hopefully I can buy one for myself one day.

I truly enjoyed the program. I am a high school senior who recently started working to earn some money. I learned a lot of things I didn’t even have an idea about Electric Vehicles. Although I still don’t know how to drive I will for sure consider buying an EV in the future. Thank you!

Watching the video really increased my knowledge of EVs. I also loved the explanations every now and then.

45,524 Students
Energy Literacy Through the Lens of New Technologies and the Future

rEV’s success is a result of more than two years of development toward cutting-edge instruction. Our focus on energy literacy is often explored through the lens of new technology. Today, that is electric vehicles.

**We asked ourselves, “How do we want students to experience this?”**

Then we built the program from there, beginning with extensive student, educator and industry focus groups. Various gaps and misconceptions in knowledge were identified, and attitudes toward natural resources, smart grid technology, electric generation and electric vehicles were disclosed. Together with resource group participants, we discovered ways of building enthusiasm for these concepts.

We went with the multimedia approach to meet secondary students where they are: passionate, engaged, resilient and excited about their futures.

**We had the opportunity to make education storytelling dynamic and insightful.**

The next months saw testing, editing, additional focus groups and a late night or two to perfect program components for the pilot programs and the large scale implementation in the fall of 2021. rEV was worth the effort. It’s not often program participants report “this is a great program and opportunity for our students” and that 85% of students know more about EVs after participation. It was fun to learn more about electric vehicles as a team and to see the enthusiasm from students across the country for learning about EVs. We look forward to many more years of helping students understand their place in the future of energy.

Janet Hatch
Chief Operating Officer
National Energy Foundation

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