

OVERVIEW Project ReCharge is a hands-on inquiry and project based STEM (Science, Technology, Engineering and Mathematics) curriculum and training program that engages students, teachers and facility staff. This interactive energy education program provides valuable professional development and classroom resources to teachers, who then empower middle school and high school students to become energy detectives focused on saving their school money through energy efficiency proposals. Innovative lessons, energy data and interactive dashboards engage students and teachers as they learn about energy generation, consumption and efficiency. Project ReCharge focuses on real world learning and application that has measurable impact on students, the environment and the community at large.



envirolution



SINCE 2015, PROJECT RECHARGE HAS:

Been implemented in

22 schools across 5 school districts in Northern Nevada

Partnered with **75 middle & high school teachers** by providing them with over **3,237 hours** of hands-on professional development training

Given each teacher access to **8-12 weeks of STEM** lessons and activities that are aligned to **Next Generation Science Standards, Common Core and 21st Century Competencies**



Provided our partner schools and teachers with over **\$122,000** in essential classroom resources



Engaged over **6,000 middle and high school students** with hands on STEM energy lessons



Improved student **content knowledge by 24%** while also **increasing student interest in STEM careers**



Received in November 2016, a **Golden Pinecone Sustainability Award for Best Educational Program**

PARTNERSHIPS The impacts Project ReCharge has made in our community are due to the established partnerships between Envirolution and the University of Nevada Reno, The National Science Foundation (Grant DRL-1433597), The Nevada Department of Education (2017/2018 MSP Grant) and all our partner school districts (Washoe, Douglas, Carson, Lyon and the Pyramid Lake Bureau of Indian Education).



STUDENT DRIVEN EFFICIENCY PROPOSALS DEVELOPED, REFINED, FUNDED AND IMPLEMENTED

Four LED retrofit proposals from students at Reed HS, North Valleys HS, Mendive MS and Dilworth MS will together **reduce their school's annual energy use by 453 MWh, mitigate CO2 emissions by 381,000 lbs every year and save Washoe County School District over \$48,000 a year in energy bills.**



PROGRAM EXPANSION AND GOALS

Over the next 3-5 years, Project ReCharge plans to partner with **20 new schools**, provide training, curriculum and classroom resources to **100 new teachers**, engage **15,000 new students** and assist in the development and implementation of dozens more student proposals that can **save school districts thousands in energy costs.**



In order to achieve these goals, we need the support of individuals, foundations and businesses in our community. Visit our website at **www.envirolution.org** to learn more about partnership and funding opportunities.

“*Project ReCharge was awesome! I really enjoyed creating turbines and windmills to better understand how wind energy is converted to electrical energy*”

- Project ReCharge middle school student