ENVIROOLUTION
PROJECT RECHARGE
CAREER QUEST
INTRODUCE A GIRL TO ENGINEERING DAY
SUSTAINABILITY EXPEDITION

IMPACT REPORT

2020

ENVIROOLUTION
PROJECT RECHARGE
CAREER QUEST
INTRODUCE A GIRL TO ENGINEERING DAY
SUSTAINABILITY EXPEDITION

IMPACT REPORT
To inspire and empower the next generation of leaders and workers who will drive the growth of a sustainable economy.

To live in a world wherein the social, environmental, and economic spheres of our lives are prosperous and in balance. We envision an educational system that employs an inquiry-based and practical approach that inspires and prepares our youth for this rapidly developing sustainable economy.

**OUR MISSION**

**OUR VISION**

**OUR GOALS**

- Provide teachers with valuable STEAM curriculum, classroom resources and professional development.
- Engage students in meaningful hands-on programs that increase their knowledge of, and interest in, STEAM and sustainability careers.
- Expand and develop programs through meaningful community partnerships
- Increase STEAM education for girls and underrepresented populations in urban and rural areas.

**LONG-LASTING PARTNERSHIPS**

Envirolution works very closely with school district administrators, teachers, and community organizations and businesses to create opportunities for Science, Technology, Engineering, Art and Math (STEAM) career development. With a focus on hands-on service learning, our programs and partnerships not only provide career development for students, but also enable our participants to give back to their communities.
PROJECT RECHARGE

Project ReCharge is a hands-on, project based Science, Technology, Engineering, Art and Mathematics (STEAM) curriculum and training program that engages students, teachers and professionals in the community. 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 home, school and community money through energy efficiency and sustainability proposals. Innovative lessons, energy data and interactive dashboards engage students and teachers as they learn about energy generation, consumption and efficiency.

IMPACT TO DATE - PROJECT RECHARGE

146 TEACHERS
Teachers from 52 schools & 11 school districts have been provided with over 7400 hours of professional development.

25K STUDENTS
Experienced a 41% content knowledge increase with Project ReCharge’s STEAM lessons.

$651K ENERGY SAVINGS
Based on 5,000+ MWh of energy savings as a direct result of student-driven energy efficiency proposals.

712
This savings is equivalent to powering 712 American homes for a year.

465
This savings is equivalent to removing 465 combustion cars from the road.

Percentage of Project ReCharge Integration by NV Counties

- 83% of Middle Schools & 56% of High Schools in Washoe County
- 100% of Middle & High Schools in Carson City
- 100% of Middle Schools in Nye & Churchill County
- 100% of Middle Schools & 33% of High Schools in Douglas County
- 66% of Middle Schools & 33% of High Schools in Elko County
- 40% of Middle Schools & 33% of High Schools in Lyon County
$280K+
In classroom materials distributed to 52 schools

100%
Of 2019/2020 teachers would recommend Project ReCharge

55%
• 55% are students from underrepresented communities
• 48% are female students

Represented Nationalities
• 60% Caucasian
• 28% Hispanic
• 4% American Indian / AK Native
• 2% African American
• 5% Pacific Islander
• 1% Asian
Career Quest connects businesses to their future workforce by exploring workplace STEM and sustainability. During 3-5 hour field trips, students learn about the businesses, interact with staff, engage in facility tours, and participate in exciting, hands-on educational activities developed with the businesses to showcase an aspect of their operations. All logistics are facilitated by Envirolution, significantly reducing impact on schools and businesses.

To date, 1,544 Students have participated in Career Quest at Tesla Gigafactory NV

Schools from 11 school districts have participated in Career Quest at Tesla Gigafactory NV

Over 184 hours have been volunteered by 26 Tesla employees during Career Quest

CAREER QUEST GROWTH

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This national event is focused on showing young females how engineering can be both a great career choice and a great way to change the world. We began our Introduce a Girl to Engineering Day (IGED) partnership with Tesla in 2018 and hosted 60 girls at Gigafactory NV with student participation increasing by 576% just two years later. With females making up only a fraction of the engineering workforce in the U.S., this event demonstrates the commitment to increasing female students’ exposure to manufacturing and engineering.
The Sustainability Expedition is an exciting, five-day opportunity for middle and high school students to travel to local businesses and organizations to explore STEAM careers, environmentally friendly practices, and learn about the local sustainability movement. We conclude the week by constructing sustainability ‘Vision Boards’ and by leading a community cleanup of Pickett Park.

81%

Attendees experienced an 81% post expedition interest in a STEAM career.

90

To date, 90 students have participated in Sustainability Expedition.

BUSINESS & SCHOOL PARTNERSHIPS

![Chart showing new schools and businesses partnerships over years]

20

20 New business partnerships have been developed as a result of the Sustainability Expedition.
COMMUNITY ENGAGEMENT

95%
Our community partner volunteer hours have increased by 95% in the past year.

5,283
5,283 people have been engaged at Envirolution outreach events

VOLUNTEER HOURS FROM COMMUNITY PARTNERS ACROSS ALL PROGRAMS

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<th>Year</th>
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<td>2018/2019</td>
<td>506</td>
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<td>2019/2020</td>
<td>987</td>
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Jane Johnson, American Association of University Women - Solar Panel Preparation
Michelle Migliori, Tesla Manager IC & PC Operational Excellence
Alicia Garcia, Tesla Senior Production Planner, Model 3
Jesse Ghisletta, Tesla Recruiter
**TESTIMONIALS**

“Without Project ReCharge I would have never had the confidence to pursue a degree in civil engineering!”.  
– Jackie Medina, UNR Sophomore Civil Engineering

“The Project ReCharge lessons taught me big picture topics using hands-on activities and made the information really easy to remember”.  
– Alex Marsh, UNR Freshman Environmental Engineering

“Utterly amazing! My students loved the hands-on experience that the 5E model allowed and when giving them a formative assessment, they did really well in understanding the content.”  
– Project Recharge Teacher

“Project Recharge was awesome! I really enjoyed creating turbines and windmills to better understand how wind energy is converted to electric energy!”  
– Project Recharge Student

“PRC makes my job so much easier! I am providing my students with an engaging curriculum that is not only attached to the standards – but is also valuable for their life skills!”  
– Project Recharge Teacher
INSPIRING THE NEXT GENERATION

OF LEADERS AND WORKERS

WHO WILL DRIVE THE GROWTH

OF A SUSTAINABLE ECONOMY