

Winds of Change: Empowering Youth in ECV Through KidWind

In the Eastern Coachella Valley (ECV), a unique and transformative educational movement is taking root, propelled by the innovative KidWind Project. This initiative stands out in the Coachella Valley Unified School District's (CVUSD) STEAM labs. But the learning is not just about science, technology, engineering, art, and mathematics. It's a holistic journey weaving together the fabric of community, environment, and education, empowering students to become agents of change in their lives and beyond.

The KidWind Challenge, the heart of this movement, is more than a competition. It's a practical platform where students delve into the real-world applications of wind energy. From designing and constructing wind turbines to understanding the science and potential careers behind this renewable resource, the KidWind Challenge equips students with tangible skills and knowledge that can shape their future.

The KidWind Project has become a symbol of hope and innovation at Coachella Valley High School. It's not just about the wind turbines; it's about students like Javier Salazar, Brian Rodriguez-Perez, and Victoria Lozano. Their personal journeys with KidWind, from regional competitions to a deep understanding of environmental challenges, are what truly embody the transformative power of this initiative.

The frequent high winds in the ECV are a double-edged sword. While they provide an abundant source of renewable energy via wind turbines in the San Geronio Pass area at the west end of the valley, they also pose significant health challenges to those living in the east. Adding to the burden is the fact that the Salton Sea is shrinking, leaving behind dry lake bed covered with toxic dust that gets blown by high winds and spread across neighborhoods. Thus, the students involved with KidWind talk about witnessing firsthand the impact of these winds on their fellow students and also their adult family members, many of whom work in agriculture fields.

The winds stir up dust and debris emanating from a wide range of sources, including fugitive dust from construction activities, unpaved roads and parking lots, and agricultural activities (including pesticide application and agricultural burning). These wind-born particles can lead to asthma and other debilitating respiratory conditions, highlighting the intersection of environmental and public health issues. As a result, according to recent research by Desert Healthcare District, the likelihood of ECV residents experiencing asthma is, on average, 26% higher than that of their neighbors to the west.

Moreover, the high winds often cause power outages, regularly disrupting the lives of many families and underscoring the need for alternative energy sources. Through their work with KidWind, students are not just learning about renewable energy, they are actively contributing to the solution. They are gaining a better understanding of how the environment plays an important role in their community's social determinants of health, and they are hopeful for a future where these issues are mitigated.

The conversation around climate change is ever-present in the students' discussions. Students recognize the reality of climate change and its impact on their valley, from hotter summers to the increasing frequency of extreme weather events. Their involvement in KidWind is a proactive step towards combating climate change, showcasing their commitment to a healthier planet.

As the students of Coachella Valley continue their journey with KidWind, they are not just building turbines; they are visualizing a future where renewable energy and environmental stewardship are at the forefront. Their efforts are a beacon of hope for their community and a model for others to follow, proving that even in the face of challenges, the winds of change can help bring about a brighter, more sustainable future.



