

Annual Sustainability Challenge showcases student ideas for environmental improvements

High school students from six Tulare and Kings county school districts created 24 projects for the annual Sustainability Challenge – projects focused on creating healthier, more resilient communities. After a competitive



preliminary round conducted earlier this fall, six finalists advanced to the final showcase held last week.

Teams developed proposals aligned with California's Net-Zero Carbon 2045 Initiatives – focusing on clean energy and energy efficiency; air quality and emissions reduction; green infrastructure and urban sustainability; waste reduction and resource conservation; and advancing environmental justice.

Following the presentations, the top three projects were announced based on their innovative solutions and outstanding presentations. The winning teams received cash prizes from SoCalGas in partnership with the TCOE Foundation.

The winning project was developed by Brooke Berry and Julieta Cerros of Summit Collegiate High School in Porterville. Their project, MethaTech, incorporated microbial

fuel cells to transform agricultural waste into renewable energy and significantly lower greenhouse gas emissions. For the students' work, Summit Collegiate received a \$1,500 prize.

The second-place project was developed by Carl Leano, Eulogio Arreola, Aldair De La Cruz, and Miguel Ortega of Orosi High School. Their project was entitled Multi-Purpose Automated Agricultural Car (MPAAC) – a solar powered vehicle designed to reduce carbon emissions while minimizing run-off and overspray of fertilizers and pesticides. The team received a \$1,000 prize.

In third place was the team of Raul Navarrete, Lezly Martinez-Pimental, and Miriam Hernandez Gaytan from Lindsay High School. The team proposed the use of the district's existing Building Automated System (BAS) and upgrades to their school's HVAC system to enhance air quality, improve temperature control, reduce energy waste, and lower long-term costs. The team received a \$500 prize.

The event was originally created in 2007 as a competition for high school students to develop business plans for products and services needed in the Central Valley. The original competition, which ran for over 10 years, returned in 2024 as the Sustainability Challenge with renewed support from SoCalGas. The competition is coordinated by TCOE's College and Career Readiness program.

Annual Christmas Bird Count scheduled for Sunday, December 14

Students, parents, teachers, and community members are invited to join the annual SCICON and Circle J Christmas Bird Count (CBC) on Sunday, December 14. The morning bird count will be held at SCICON from 8:00 a.m. until noon. The afternoon count will be held at Circle J-Norris Ranch from 1:30 until 4:30 p.m.



For over 125 years, the National Audubon Society has conducted annual Christmas Bird Counts (CBCs) involving thousands of volunteers across the United States,

Canada, and several other countries in the Western Hemisphere. CBCs are early-winter bird censuses conducted between December 14 and January 5 each year and led by community science organizations. The surveys are conducted within 15-mile diameter circles established by the Audubon Society.

In Tulare County, three active circles exist – one at the Kaweah Oaks Preserve, one at the Giant Forest Village in the Sequoia National Park, and one in Springville. The SCICON outdoor education program and its Circle J-Norris Ranch field study site both fall within the Springville survey area.

Participants in the SCICON and Circle J CBC are encouraged to bring their own lunch and water, and to dress warmly. Binoculars will be provided to those who need them.

Please RSVP for the CBC by calling or texting Amanda Driver at 559-359-8575, or by emailing circlej@tcoe.org.

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