About ECO2school:

The Center for Climate Protection’s Youth Leadership program, ECO2school, inspires young people to take action for immediate greenhouse gas emission reductions while promoting long-term personal and community environmental action.

ECO2school has been working in high schools across Sonoma County since 2006 engaging clubs and classes in hands-on service learning projects to bring real life educational applications to schools that support healthy living, safe low carbon commutes, traffic decongestion, and improved air quality for the entire community.

2016-2017 Program Results

Throughout the 2016-2017 school year, ECO2school leaders encouraged peers to use active modes of transportation for their school commutes. ECO2school worked in 12 Sonoma County schools and reached 11,449 students, of which 7,029 participated in at least one behavior change action.

The regional pilot focused on partnerships in two greater Bay Area counties, the Silicon Valley Bicycle Coalition in the South Bay, and Hunter's Point Family in San Francisco. The pilot reached four high schools, two in each community, and provide the education and encouragement program to 829 students.

The following data reports the impact of ECO2school’s single-day events and the multi-week ECO2school Challenge:

**Overall Impact**
- 24.5 fewer tons of CO₂ were emitted

**Single Day Events**
- 5.6 fewer tons of CO₂ were emitted

**The ECO2school Challenge**
- 18.9 fewer tons of CO₂ were emitted
- 47,269 fewer miles were driven
- 1,592 fewer gallons of gas were consumed, thus saving $3,249.60
Changes in Student Transportation Behavior

When adjusted data from the fall and spring are compared, it shows that students increased their use of active modes of transportation, resulting in a 9 percent reduction in vehicles miles traveled (VMT), carbon dioxide emissions, and gasoline consumption.

Students walking and biking over the school year increased by 5 percent and 12 percent respectively. The chart above depicts the percent change in students’ transportation modes between fall and spring.

Similar to years past, we saw a corresponding increase and respective decrease in students driving alone and being dropped off. This mirrored divergence is likely due to the number of students acquiring their driver’s license. More significant is the 3 percent greater difference in drop-offs. Biking went down this year. We think this may be because of the record amount of rain this school year.

Students’ participation in and exposure to the ECO2school program positively impacted their transportation choices, and resulted in emission reductions in Sonoma County.

Regional Pilot

ECO2school facilitated a regional work group and piloted two satellite programs this year. The regional work group met five times over the course of the year with representation from all nine Bay Area counties.

In San Francisco we provided education program to two schools reaching 378 students with Climate and Energy Literacy Education. With our partner organization we created a leadership team with 15 participants and 5 paid internships.

“Be aware that you are capable of great things. Be aware that you are capable of shaping your own future, and be aware that you have the power to change the world.”

~ Tess Caldwell, Analy High School
In the South Bay we worked with three schools through a partner organization reaching 135 students with encouragement activities.

**Evaluating the ECO2school Program**

**Bicycle Use:**
Students were asked a number of questions to ascertain bicycle use habits. Of the students surveyed, 73 percent responded. The following results reflect the percentage of responding students.

- 77 percent of students own or have access to a working bicycle.
- Only 48 percent of students who own a bike use a helmet when cycling.
- 25 percent of students with a bicycle use it for transportation while 65 percent use their bike for sport or fun.

**Participation:**
67 percent of participating students took part in at least one behavior change activity. Cocoa 4 Carpoools continues to be the favorite encouragement activity, with 3,070 students participating. Some leadership teams experimented with Cookies 4 Carpoops instead of Cocoa. That may account for the increased participation.

From 2012-2016 the program increased its participation. In the 2016-17 school year funding restrictions limited the number of schools we were able to serve resulting in a decrease in student participation. Despite the funding challenges, we doubled the number of student participants on our Youth Advisory Board.

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**The Youth Advisory Board is an open, fun, and electrifying group of kids who help each other grow. We are gathered around a fundamental mission of stopping climate change. The movement grows stronger as we develop our individual leaderships skills.**

*~ Annabelle Lampson, Analy High School*

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**Student Leadership**

ECO2school equips student leaders with the tools and confidence to coordinate campus transportation projects. In the process, these students are supported and empowered to be effective climate leaders. 120 students volunteered to lead activities on their high school campuses. These student leaders are winning awards and scholarships for their work, and are embarking on educational and professional careers with an environmental focus.

**The Youth Advisory Board**

The Youth Advisory Board (YAB) consists of student leaders passionate about making positive change. Twenty-four students representing 58 percent of participating schools joined the board. 70 percent of graduating YAB members got into their first choice college. These youth leaders help shape the program, organize events, speak at political and community venues, and provide a youth perspective to the larger community of climate activists. Over the course of the 2016-17, YAB members implemented the following actions:
» Green Teen Gathering: 101 participants representing nine schools and seven different community organizations gathered to network and exchange information on how to improve sustainability on their school campuses.

» Climate Walk and Talk: 54 students at the regional Youth for Environment and Sustainability Conference came together to discuss innovation climate solutions.

» Green Career Pathway Mixer: Eleven youth and twelve young adult professionals met and discussed education and career pathways related to climate, environment, and sustainability.

» Climate Conversations: Five YAB members attended events organized by the Center for Climate Protection to share their perspectives and insights on climate change.

» Advocacy Day: Four board members traveled to Sacramento and met with sixteen legislators to share their opinions about SB1 - Complete Streets, AB17 - Student Transit Passes, and AB179 - Equitable Representation on the CA Transportation Commission.

Student Outreach:
As a result of their work, YAB members reached 1,620 people across the Bay Area speaking at the following events:

» Climate Forward Bay Area: A gathering of technology, government, NGO, and industry leaders in a forum to share ideas and approaches to reducing local greenhouse gases while maintaining economic viability.

» Transition Sebastopol TEDX talk: Community speaking event to create a positive vision of the future by cultivating community resilience in response to potential challenges of resource depletion, climate change, and economic instability.

» Shomrei Torah's social action film series: Participation in a panel following the film Catching the Sun

» Youth for Environment and Sustainability Conference: A YAB member was the keynote speaker at the conference where hundreds of Bay Area students come together to discuss better ways to get to school or work, and to participate in leadership workshops put on by other teens.
» Regional Parks: Addressed the staff and key volunteers at their annual retreat.
» Student presentations to the Santa Rosa City Council.

Survey methodology

For single-day events, teachers collect transportation tallies. The carbon savings were calculated based on these tallies, in conjunction with school transportation data. Posters were used to calculate Challenge participation while surveys collected additional information.

Student leaders at seven schools surveyed peers about their school commute behavior at the beginning and end of the school year, and collected general feedback regarding education and encouragement programs. One school’s data sample was too small to be usable. Of a total student population of 7,223 in the six remaining schools, a random sample of 1,049 students were surveyed in the fall, and 1,244 students were surveyed in the spring, for a combined 16 percent representative sample.

Students provided their home address to determine the vehicle miles traveled during their school commute. They also reported the transportation mode(s) they used for the five-day school week, or 10 one-way trips to and from school. From this information, the estimated pounds of CO₂ emitted for each surveyed student were calculated. The representative samples of student responses from each school were then extrapolated to reflect the entire student body at each individual school.