



# Green Cerritos

## College Sustainability Initiatives



Cerritos College is an environmental leader. The District is dedicated to adhering to sustainability practices and policies that conserve the planet's diminishing natural resources. The District is creating a campus environment that fosters sustainability through conscious decision-making strategies, focusing on:

- Green facilities that meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) standards
- Energy efficiency and alternative energy sources
- Waste management
- Water conservation
- Instructional programs
- Reducing greenhouse gas emissions

### Green Campus Policies

- *April 2023* – The College won [the Green Award](#) at the 2023 Foundation for California Community Colleges (FCCC)/CollegeBuys Purchasing Conference for the Cerritos College Purchasing Department's commitment to sustainability for its preference towards purchasing eco-friendly products, the most out of all the California community colleges during 2022.
- *November 17, 2021* – The Board of Trustees adopted a Break Free From Plastic resolution, making the campus the first community college in California to adopt a policy to abandon the use of plastic products. The effort was led by student leaders, and the campus is in the process to create an action plan to implement the policy.
- The California Community Colleges/Investor Owned Utilities (CCC/IOU) partnership selected Cerritos College for a pilot study to pursue a complete building energy study/retrofit called a High Opportunity Project (HOP). Currently, Cerritos College is the only community college selected for this pilot study, joining the University of California and California State University pilot projects.
- *June 1, 2016* – The Board of Trustees approved the Cerritos College Sustainability Plan, a holistic, site-specific guide to promoting sustainability on the campus. The plan will ensure that the College meets

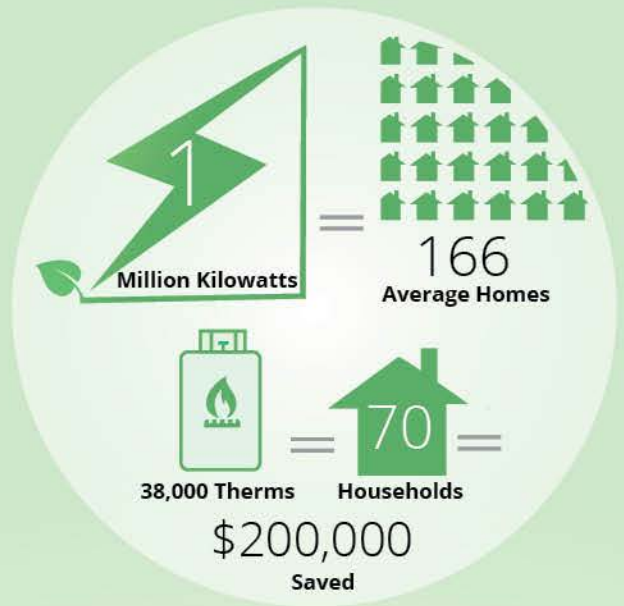
the ever-changing educational and facilities needs of its students and community, and expand the learning environment to support student success and completion.

- *September 16, 2015* – The Board of Trustees approved a long-term Integrated Energy Master Plan (IEMP) that complements the Facility Master Plan. The IEMP is a comprehensive strategic plan that identifies various energy-related projects and methodologies to be employed by the College in support of the campus building and modernization program.
- The campus established a Sustainability Task Force to develop and implement a campus sustainability plan, establish goals, and track progress.
- *September 17, 2014* – The Board of Trustees adopted Resolution No. 14-05 Declaring Design and Development of Facilities to be Leadership in Energy and Environmental Design (LEED) certified for new buildings in excess of **\$5 million**. LEED certification is set by the U.S. Green Building Council. The Health & Wellness Complex, completed in 2020, is the first LEED-certified building at Cerritos College. The Performing Arts Center, completed in 2022, is the second LEED-certified building. The Health Science Renovation project, which is currently out to bid, will be the third LEED Certified project for the College. Construction is anticipated to begin in late fall 2022 and complete in late 2024.
- *June 18, 2014* – The Board of Trustees adopted [Board Policy 3580](#). The campus-wide sustainability policy is focused on developing practices that promote conservation and energy efficiency.
- *June 4, 2014* – The Board adopted Resolution No. 14-14 to authorize the creation of a Cerritos College CalRecycle Program. Income generated from the student-led recycling program goes to support the Associated Students of Cerritos College.
- *May 5, 2014* – Associated Students of Cerritos College adopted a sustainability policy to develop students into global citizens through the knowledge, skills, and values of sustainability concepts.



## Energy Conservation Measures

- The College received approval from Southern California Edison (SCE) for its 7,086 kilowatt (7.86 MW) solar system project that will offset 85% of the College's energy. The project is estimated to bring over \$16 million in energy cost savings over the next 20 years to the College.
- The District implemented the Board of Governors (CCCBOG) Energy and Sustainability Policy guidelines to adjust building temperatures and provide heating and cooling in line with sustainable practices. In order to reduce our the District's dependence on fossil fuels, the campus is adjusting its building temperature limit to 75°F in warmer months and 70°F in colder months. These guidelines will not only decrease the District's dependence on public utilities, it will also reduce its greenhouse gas emissions by 278 metric tons of per year.
- The College received the California Community Colleges Board of Governors 2017 Energy and Sustainability Award for its Science Building retro-commissioning project that is saving the campus \$25,000 in energy costs annually.
- Cerritos College has received over **\$895,000** in utility incentives from 2006-2015, significantly reducing electricity and natural gas consumption.
- The District received over **\$1.5 million** in state funding from Governor Brown's 2012 Green Jobs Initiative. These funds have allowed the College to retrofit lights to LEDs, fine-tune building mechanical systems, and reduce electrical consumption by **over 1 million kilowatts** (equivalent to the annual electrical use of 166 average households). The College's natural gas use has also been reduced by 38,000 therms, which is equal to **70 average households'** natural gas use for one year, saving the College more than **\$200,000** annually.
- The College used the Green Jobs Initiative funding to retrofit campus lighting, expand chilled water cooling systems, and enhance energy management.



## Water Conservation

In the midst of California's historic drought, Cerritos College is taking steps to reduce its water use:

- In 2016, the College redeveloped the landscaping along Alondra and Studebaker with drought-resistant and low-water use plants. Potable water systems were replaced with the College's reclaimed water irrigation system. This project, totaling nearly one acre of land, was supported with over \$500,000 in state grant funds.
- To reduce water, the College features a variety of drought-resistant plants in its landscape, including California native species such as live oak trees, echervia, euphorbia, aloes, and hesperia.
- Over 95 percent of the campus landscape and athletic fields are irrigated with reclaimed water purchased from a local municipality provider.

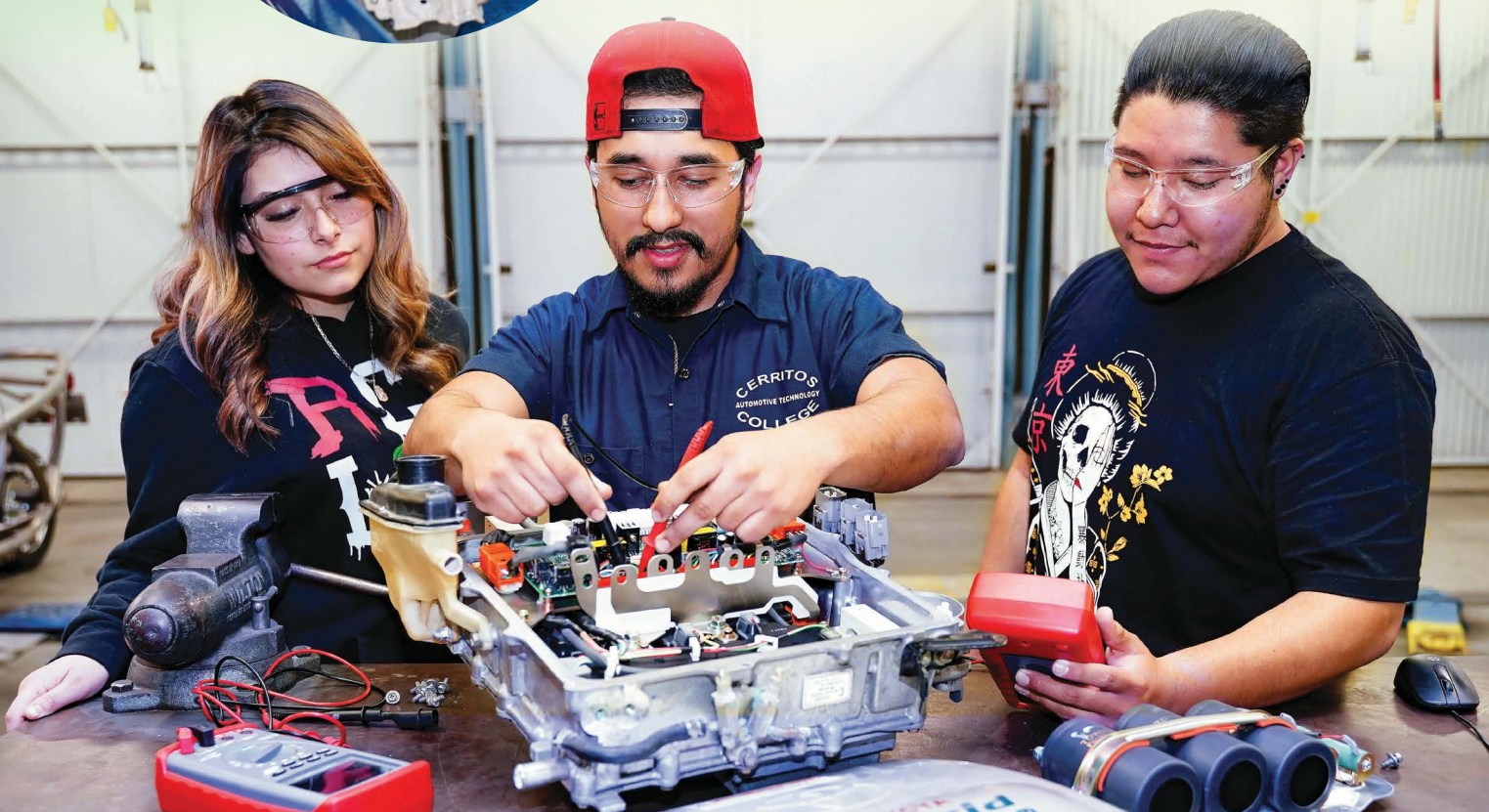
The College was recognized with the 2014 Green Community College Leadership Award for this resource conservation measure. By using reclaimed water for landscape irrigation, Cerritos College saves more than 30 million gallons of potable water per year. This is equivalent to saving the same amount of water that 185 families of four would use for one year.





## Green Education

- Cerritos College's Automotive Collision Repair Program was one of five recipients of the Collision Repair Education Foundation's 2014 Sustainability Challenge Grant. The **\$5,000** grant provided resources to assist school collision repair shops with ways to create a more sustainable campus community. The program continues to implement the challenge grant by greening its operations, including recycling and reinventing processes that reduce carbon emissions.
  - The College's Automotive Technology General Motors ASEP program has embedded technical training in hybrid and electric vehicle technology.
  - Cerritos College's Advanced Transportation and Logistics Center (ATL) offers training to the automobile industry on alternative fueled vehicles (electric vehicles, compressed natural gas, and hybrid vehicles) through a **\$150,000** grant awarded to the College by the California Energy Commission.
- The ATL received \$3.5 million in grants from the California Energy Commission to develop clean fuel training programs for high schools in underserved communities, regions impacted by poor air quality, and those serving minority populations. The Zero-Emission Vehicle Training Enhancement Program has funded 28 high schools, served approximately 1,800 students each year and trained 36 high school and community college faculty members for the new electric vehicle curriculum.
  - The Architecture Technology Program offers a green architecture class to our students by introducing them to sustainable architecture and Leadership in Energy and Environmental Design (LEED). Exercises emphasize the development of basic skills used in the design of environmentally friendly architectural projects. Focus is on the investigation of the relationship between planetary concerns, energy, indoor air, quality, site selection, building orientation, and alternative construction techniques
  - Cerritos College is a training provider through the California Advanced Lighting Control Training Program. The statewide initiative aims to increase the use of lighting controls in facilities through education.



## Greenhouse Gas Reductions

- In April 2014, Cerritos College installed eight Electric Vehicle Charging (EVC) stations for public use. For \$0.32 cents per kilowatt hour, electric vehicle owners can charge their vehicles at the College. Through electric vehicle charging, the College has reduced greenhouse gas emissions by 11,254 kilograms, which equals the reduction of carbon monoxide released into the atmosphere created by 12,009 pounds of burned coal. The Electric Vehicle Charging stations were partially funded by the South Coast Air Quality Management District, which provided an **\$8,000** rebate upon successful implementation of the units for public use.
  - The campus currently has 10 EV charging stations for public use, and the renovation of the Health Science building will add an additional four stations after its renovation is completed in 2024. This will reduce the College's greenhouse gas emissions by an additional **10,000 kilograms** or more.
  - The Associated Students of Cerritos College established a campus recycling program in 2013. Students collect, transport, and sort recyclables and use the funds to support student activities on campus.
  - The campus currently recycles cardboard, green, and food waste. The total savings to the environment is priceless.
  - The College has over 70 bottle filling stations at various locations throughout campus that allow users to use refillable bottles with fresh drinking water, thus reducing the number of plastic bottles from landfills. These stations have eliminated the use of over **1,300,000 plastic bottles**.



## Central Plant

- Cerritos College utilizes a chilled water central plant to provide cooling to the campus buildings. This centralized method of cooling is considerably more cost-efficient compared to individual building equipment.
- Central Plant will be replacing filter media (tower fill). Performing this replacement will add to the College's ability to keep cool in the summer. Replacing this material will take place early this fall so we can keep our campus cool for the next seven to 10 years.
- The College's swimming pools are heated through solar blankets that warm the water when the pool is not in use through a heat exchanger with the central plant. The condenser water heat is essentially a free byproduct of mechanical cooling, which reduces the need for gas heating. As a result, there is a reduction in use of natural gas of approximately 17,000 therms per year or an annual savings of **\$14,450**.
- The swimming pool will be adding new storage for water treatment. This storage system contains the latest technology and adds fluids based on temperature and atmospheric demand. This system will save approximately **\$5,000 dollars per year** and reduce labor by half by conditioning the water automatically.

## Solar on Campus

- The College has expanded the use of stand-alone solar devices on campus. Two solar-powered electronic device charging stations have been installed on campus. These solar charging stations allow for multiple phones or other devices to be charged using solar power.
- The College has entered into an agreement to install solar panels on campus. This project will provide enough electrical capacity to run over 80% of the campus. This effort will also save over **7 million kilowatts per year**.

For more information about Cerritos College's green efforts, please visit: [www.cerritos.edu/greencerritos](http://www.cerritos.edu/greencerritos)

