SAN DIEGO COMMUNITY COLLEGE DISTRICT
San Diego, CA

As the recipient of the APPA’s 2015 Sustainability Award recognizing and advancing sustainability excellence in educational facilities, San Diego Community College District uses a Cree® LED lighting upgrade with SmartCast® Technology to spotlight their Proposition 39 Clean Jobs Act initiatives.
Opportunity

With the passing of California’s Clean Energy Jobs Act (Proposition 39), Chris Manis, Vice Chancellor of Facilities Management for the San Diego Community College District (SDCCD), saw a golden opportunity to finance facility upgrades across his campus system. A state program providing funding for improving energy efficiency, Prop 39 makes available up to $550 million annually to eligible educational agencies to pay for energy projects with a strong return on investment.

As the second largest community college district in the state, SDCCD continues to grow rapidly, tripling their footprint in less than 10 years while at the same time maintaining their commitment to sustainability. Manis had an extensive wish-list of energy-saving projects, so he and his team set to work submitting their energy expenditure plan applications.

Solution

It quickly became apparent that lighting projects were the preferred funding recipients. As Manis explains: “If I save 20% on my electric bill, then those dollars became available for other projects. We call lighting the low hanging fruit because it has one of the largest savings potentials, especially when upgrading older facilities that still have incandescent or older fluorescent fixtures.” Once funding was secured, SDCCD worked with several partners to find a lighting solution that would have the largest ROI while meeting socially responsible investment goals. One name rose to the top – Cree.

According to Mark Doubleday, Senior Planner, Energy Systems & Facilities Maintenance for SDCCD, “Inefficient lighting uses a lot of money per month on kWh and manpower. While we’ve tripled our footprint, we haven’t tripled our manpower, so we have to be smarter. With a maintenance backlog that’s 50 to 70% lighting replacements, 7 campuses spread out over 35 miles and only 4 electricians, that’s a challenge. We’re going after as much difficult lighting as we can to realize savings."

Doubleday continues, “That’s how I ended up looking at Cree as one of the better solutions long-term. It was the product line that was going to give me the best quality of product over broad applications. As part of the upgrade to the administrative offices, SDCCD installed Cree® CR Series troffers with SmartCast® Technology, delivering exceptional lighting performance and essential lighting control without the complex design, installation and set-up of traditional lighting control systems. Exterior lighting also received a refresh with the installation of Cree Edge™ area, security and high output flood lights, creating well-lit spaces that enhance safety and security.

“Feedback I’ve received is that the occupants are really happy with the quality of light. When you improve the workspace and then increase performance from an efficiency and facility utilities budget standpoint, it’s a win-win.”

Chris Manis | Vice Chancellor, Facilities Management, SDCCD
As Andrew Hoerner, Energy Solution Sales Manager for Rexel, explains: "With the CR Series troffers, these high-efficiency fixtures were a great way to demonstrate the benefits of LED not only with energy savings, but we had the added benefits and attributes of controls tied into Title 24." Hoerner continues, "Rexel’s Energy Service team identified Cree’s SmartCast® Technology as the best fit for energy savings, ease of install, Title 24 compliance, rebate eligibility and end-user comfort. We were able to come up with the ultimate solution that the campus folks are very happy about."

Previously, SDCCD used on-bill financing with their utility SDG&E, paying for projects through energy savings. Now, SDCCD could fund the project completely through Prop 39, and as an added bonus, the Cree LED lighting solution also qualified for incentives from SDG&E.

Another key benefit of the Cree® LED lighting solution was the 75,000 to 100,000 hours life expectancy, offering huge maintenance savings. As Manis explains, "One of our main weighted categories was life of product. Now I don’t have to send an electrician out but once every 10 years," allowing the facilities staff to divert the resources to other areas.

In terms of safety and security, the Cree SmartCast® Technology controls solution has been a boon. Manis explains: "In large offices, we’ve grouped the fixtures and occupancy sensors to accommodate people that work after hours. If they’re working late in a remote corner, I grouped that office with the main office so those main office lights stay on."

Manis continues, "One of the qualities we like is the ability to make adjustments. I like my lights on full blast. Next door, they want 80%. I’m still saving 20% on my energy use while the person next door is saving even more and they’re happy with their amount of light. The ability to have a hand-held programmer controller allowed us to make adjustments quickly and easily."

As far as light quality, Doubleday states, "With fluorescent, you are constantly getting pounded with flicker. Because the Cree® lights are so much more consistent and there’s no flicker, the lights look brighter so we’ve had to make adjustments. We’re using daylight sensing and we’re dimmed below factory measurements, so we’re getting additional estimated 25 to 30% savings at minimum as well as extending fixture life.”

**Benefits**

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**Cree® LED Lighting Used**

- CR Series LED Troffer
- Cree SmartCast® Technology
- Cree Edge™ Area & Security
- Cree Edge™ High Output Flood
- XSP Series Area

**Participants**

**End User:** San Diego Community College District  
**Agent:** CRI Lighting Sales, Inc.  
**Distributor:** Rexel, Inc.

Visit [www.cree.com/lighting](http://www.cree.com/lighting) or contact a Cree lighting representative to learn more.