**LADWP grant overview**

Refer to: [**www.ladpw.com/np**](http://www.ladpw.com/np)

* engage residents and businesses in reducing energy and water use
* use manner appropriate to local community
* use LADWP energy efficiency, water conservation and Community Solar programs
* innovation, collaboration
* track numbers reached, energy and water savings
* 50- 100% energy efficiency
* Retrofits for education/outreach can comprise 30% of activities (eg. at a church, school, prize for homeowner?)
* local requirements to prevent water waste
* low-flow toilets and showerheads
* cash in your lawn program
* additional outreach to multifamily residences and high water users (golf courses? – biochar? AquaCents?)

**Grant specs:**

* email app. to ladpw by 3:00 pm on July 1
* Specify CD (CD 12)
* Also citywide
* 12 month project max. No start date given. (Sept 1st?)

**Evaluation criteria will include (100 points possible):**

* Responsiveness to application requirements (10 points)
* Addressing local area needs (20 points)
* Past performance with behavior impacting programs (10 points)
* Cost-effectiveness and viability of proposal (25 points)
* Energy and/or water savings impacts of proposal (20 points)
* Proposed tracking and quantification methods (10 points)
* Innovation (5 points)

**Personnel (ideas)**

Mechelle Best (energy auditor)

Ivana Dorin, Energy Coalition (workshops, school training?)

Susan Belgrad, Gini, Brian Foley – teachers and school access

SUST 310 students

Abhishek – SUST 310 (students and student training)

Loraine – SUST 310 (students and student training)

GRID Alternatives

Teachers

HOAs (workshops)

Neighborhood Councils (workshops and outreach help)

Churches (workshops)

City Council staff (workshops and outreach help)

SUST 401 student on native plants

**Ideas**

1. mapping of lawns and targeted students door to door
2. native plants that do well (Jim Logsdon + LADWP list + Theodore Payne list + Santa Ana Botanic Garden list) – make brochure
3. drought tolerant trees (LADWP or other list) + photos – brochure
4. brochure on all rebates – door to door
5. workshops in community – through HOA, Neighborhood Council, churches
6. help councilman develop e-listserve – local residents interested in Going Green (see T.O. example)
7. outreach thru’ schools – in class presentations
8. outreach thru’ schools – train teachers
9. demonstration garden(s) and/or competition to win free upgrade
10. connect to contractors who do retrofits?
11. Can students do questionnaire assessment to see if homeowner qualifies?
12. Can students complete rebate forms?
13. Can students give out free products – sprinkler heads?
14. social media

**Energy Use and Rebates**

<http://www.csun.edu/~ys9503/ladwp14/background.html>

LADWP - RESIDENTIAL ENERGY EFFICIENCY REBATE PROGRAM:

<http://energy.gov/savings/ladwp-residential-energy-efficiency-rebate-program>

Energy Efficient Products: <https://www.ladwp.com/ladwp/faces/ladwp/residential/r-gogreen/r-gg-buyefficientproducts?_adf.ctrl-state=ml0ancntk_137&_afrLoop=28501922361545>

Community Solar: <https://www.ladwp.com/ladwp/faces/ladwp/residential/r-gogreen/r-gg-commsolarprogram?_adf.ctrl-state=ml0ancntk_137&_afrLoop=28529593708737>

<https://www.ladwp.com/ladwp/faces/ladwp/residential/r-savemoney/r-sm-rebatesandprograms?_afrLoop=27973080794807&_afrWindowMode=0&_afrWindowId=null#%40%3F_afrWindowId%3Dnull%26_afrLoop%3D27973080794807%26_afrWindowMode%3D0%26_adf.ctrl-state%3Dml0ancntk_124>

<http://www.kcet.org/news/redefine/rewire/conservation/ladwp-sets-higher-energy-saving-goals.html>

“The Los Angeles Department of Water and Power has set a goal to become 15 percent more energy efficient by 2020, exceeding the state's requirement for utilities to cut energy use by 10 percent, Mayor Eric Garcetti said Monday.

The energy conservation goal will help "address climate change and keep our power bills low," Garcetti said.”

**Grant Application**

**1. Organization name, address, phone and e-mail information:**

The University Corporation

California State University, Northridge

18111 Nordhoff St.

Northridge, CA 91330-8232

Phone: 818-677-2901

Fax: 818-677-4691

[scott.perez@csun.edu](mailto:scott.perez@csun.edu) or [Stefanie.Friesen@csun.edu](mailto:Stefanie.Friesen@csun.edu)

**2. Project Manager name and contact information:**

Dr. Helen M. Cox

Director, Institute for Sustainability

18111 Nordhoff St.

Northridge, CA 91330-8444

Phone: (818) 677-7710

[helen.m.cox@csun.edu](mailto:helen.m.cox@csun.edu)

**3. Date obtained 501c3 status and under what name (please attach copy of IRS**

**registration):**

Tax exempt under Section 501(c)(3) of the Internal Revenue Code, dated May 20, 2003, under name: The University Corporation, California State University, Northridge. 18111 Nordhoff St.

Northridge, CA 91330.

**4. Provide the geographic area(s) (Los Angeles City Council District(s) and/or citywide) for**

**which you would like to be considered. If you indicate more than one Council District,**

**please only quantify your activities and impacts for a single Council District for questions 6**

**and 7. If you are applying for the peer facilitator award, indicate so here and provide**

**subsequent answers in that context (see also alternate questions 6 and 7).**

Council District 12

and

citywide

**5. Describe your organization’s experience with behavior-impacting programs.**

California State University, Northridge is one of the largest universities in the country, serving 40,131 students, and the only four-year institution of higher education serving the 1.8 million residents of the San Fernando Valley. Through the university’s degree and certificate programs, students gain knowledge, experience, competencies, and skills, and develop their critical and creative abilities, and ethical values. In addition to the formal education that the university offers, CSUN serves the community at large with services, informal education and community programs.

We are home to service-learning projects, community outreach programs and centers and volunteer groups, and partners with a myriad of organizations in the Los Angeles region to provide no and low-cost services in a large range of different areas, from tax assistance to health and nutritional programs to counseling services, energy efficiency, solar education, organic gardening, the list goes on. Indeed CSUN received the highest federal recognition possible for its service to the community when it was nominated to the 2013 President’s Higher Education Community Service Honor Roll. Some of these programs are support programs, some educational, some therapeutic, training, behavior changing, but all confirm the university’s dedication to serving the community. At CSUN more than 3,500 students take part in active projects to help the community through service learning in their courses, another 6,000 students work with the community through fieldwork and internships, and more than 6,300 students participate in community projects through campus clubs and organizations.

Examples of specific behavior-impacting programs that we’ve implemented include our Sustainable Office Program, in which students, staff and faculty are assisted in implementing sustainable practices in their workspaces; a series of Energy Efficiency and Go Solar Workshops for the community in which we educate residents on how to save energy through efficiency measures, and provide help for those interested in installing solar on their homes; our Organic Gardening and Composting Workshops, in which community members can learn about creating and maintaining their own healthy food gardens; Commit to Be Fit, a free fitness and wellness program led by CSUN Kinesiology students four nights per week; the Veterans Theatre Project in which CSUN students lead theatre activities and presentations with community partners on and off campus; Teenage Drama Workshop (TADW), a six-week, intensive summer workshop for young people and Joining the Spectrum, in partnership with The Miracle Project, which brings together an ensemble of neurodiverse teenage performers; Neighborhood Partners in Action (NPA) that helps build bridges between community-based organizations and stakeholders by fostering communication and collaboration; a Farmer’s Market to encourage healthy eating of local produce; a Childhood Obesity Program to confront this problem through healthy eating and exercise, reaching over 2,500 children within the Van Nuys community and their parents; the Mitchell Family Counseling Clinic which provides counseling services to children, families, and adults.

**6. Describe your organization’s proposal to provide education and outreach to affect energy**

**efficiency and water conservation behavior change. Clearly identify what segment(s) of**

**the community you intend to reach and explain and quantify your activities (what/where/**

**when/how/how many times). Describe the anticipated impacts of your proposal. Explain**

**how you will reach your goals. (Peer facilitator applicants: Describe your proposal to**

**assist the other 18 non-profit organizations in reaching their project goals. What services**

**and activities will you provide?)**

In 2013-14 in its second round of funding, LADWP funded a Geographic Information System (GIS) study of the LADWP service area to analyze energy use and its rebate programs geographically and demographically (<http://www.csun.edu/~ys9503/ladwp14/background.html>). This study, based on utility use and LADWP energy efficiency program records, concludes that energy consumption per person is highly variable geographically (and demographically), changed only slightly (less than 1%) between 2009 and 2012, that participation in some programs grew between 2008 and 2012 while others showed little growth or were stagnant, and that methods by which residents learn about rebate programs differs greatly based on demographics. These findings are useful to us in targeting our outreach and education to the specific area where we propose to work.

Our target district, CD 12, has one of the highest per capita residential electricity consumptions in the city at over 3,000 kWh per person per year. Commercial energy use is high in a few specific locations in the district, mostly to the west, where the shopping mall and some industrial spaces exist. While some of the residential energy efficiency rebates available yield approximately constant absolute savings regardless of their area of deployment – such as refrigerators and clothes washers - the energy saved from others is proportional and will be greater for higher energy users such as those in the northern part of the district.

There are four components to our proposed approach for providing education and outreach to the community to improve energy efficiency and water conservation throughout Los Angeles. These are (i) community workshops and outreach to business owners, (ii) outreach and education in schools, (iii) community event(s) and (iv) social media, and are described in the text that follows.

(i) Community Workshops and Outreach to Business Owners

A series of workshops focusing on three areas – energy conservation and efficiency, water conservation, and LADWP’s community solar program will be held in the community for the public. We will partner with local homeowners’ associations, neighborhood councils, other community organizations such as local chapters of the Sierra Club, Kiwanis, churches, and community centers, and the councilman’s office to secure venues for these events and to market these through websites, newsletters, listserves, fliers and local newspapers. The workshops will be held in the evenings and on weekends and will last for an hour and a half. Workshops will be divided between the themes of energy and water conservation, with an introduction to the solar program included within the energy component. Both themes will cover LADWP’s rebates, and the water conservation workshops will provide detailed information regarding the LADWP’s turf replacement program. In these workshops, residents and business owners will learn about options for alternative landscaping, including good region-specific choices for drought-tolerant and native plants, and low water demand trees. Information developed by LADWP and other educational resources will be utilized including that published by the California Native Plant Society, Theodore Payne Foundation, the Santa Ana Botanic Garden. Samples and photos of appropriate plants will be demonstrated and weekend workshops held at some locations (including the CSUN campus) will include a tour of native plant demonstration gardens.

Workshop energy presentations will be given by staff and faculty from CSUN’s Institute for Sustainability, and by non-profits who are partnering with us on this grant, specifically the Energy Coalition and GRID Alternatives. Each of these organizations brings its own experience and knowledge on energy efficiency and solar to the program.

We propose to offer 12 monthly workshops during the period of the grant within CD 12. Three of these will be held on the campus of CSUN, two on Saturdays that will utilize the native plant gardens established here to teach about drought-tolerant landscaping. The other nine workshops will be held at community centers, libraries, churches and local businesses as available and identified by our partners. We plan to divide workshops evenly between the themes of water and energy.

We have demonstrated experience in successfully hosting community workshops in partnership with cities and community organizations. Over the past year, our Institute for Sustainability has hosted six on-campus workshops on Going Solar, and workshops in partnership with the cities of Thousand Oaks, Simi Valley, Calabasas, Long Beach and Culver City that have attracted up to eighty participants. Although the theme of the workshops proposed here is different, we anticipate that the organization and outreach for these energy and water workshops will be similar, albeit offered in a different geographical area.

(ii) Outreach and education through schools

Workshops are one of the most traditional means of disseminating information, but unfortunately too often the attendance is disappointing. In fact LADWP already offers workshops throughout the region, which we propose to supplement in CD 12, with an element of hands on demonstrations. In order to greatly increase numbers of residents reached, we propose to address outreach to homes in a novel manner through K-8 student and teacher education. We believe that by reaching young people through a series of Project Based Learning activities that will be conducted on their school campuses we will engage with children, who are curious and concerned about the world, climate change, and the drought. In addition to their high degree of engagement through their PBL experience they will also become messengers to their families and community members as they lead showcases the display the outcomes of their collective work.

Through the use of computer supported collaborative science tools, they will be supported in sharing their knowledge and passion to implement change with their parents and family members, This approach to using the tools of PBL together with collaborative science tools will be piloted in the graduate education program that will provide direct in-class education, graduate projects on sustainability (involve home energy/water audits and efficiency upgrades, and a campus community event to which students bring their parents and demonstrate their projects. The education will be designed specifically to target energy and water efficiency measures that students can share with their families. Students will be provided with brochures and other forms of information about LADWP programs to take home.

The College of Education at CSUN educates ?? teachers each year, many/most of whom will teach in the Los Angeles region. In fact CSUN graduates ??% of all of California’s teachers. (Add some stats. here.) In addition, once teachers are deployed in the schools, there are a host of teacher professional education programs on campus that they attend at weekends and during summer to further their knowledge and skills, and further their Science Technology Engineering and Technology (STEM) education. In particular we host cohorts of middle and high school science teachers in our Secondary Science Education MA as well as K-8 teachers in the innovative STEM Master’s Joint Program with Columbia Teachers College. Under this proposal we will engage teachers from this program in professional development specifically related to understanding energy and water use, efficiency and conservation strategies, and best practices in the sustaining these resources. We will work with teachers to develop computer supported curriculum and instruction along with materials appropriate for K-8 students and their families. An important component of this learning experience will be school campus based student projects that incorporate specific LADWP incentives and rebates for improving energy or water efficiency in their homes. These will include auditing of their current home devices (light bulbs, appliances, shower heads, sprinkler heads etc.) appropriate for the level of student and residential situation (multi vs single family). CSUN faculty will work with teachers in the program to develop these. For example, students might be asked to re-design school lawn areas to incorporate appropriate drought-tolerant or native plants that they then teach their families to achieve at their homes, quantify the energy savings associated with switching their light bulbs at home, audit energy/water use by their refrigerator and clothes washer by reading meters or using Kill-A-Watt devices. They can translate these into cash savings by utilizing the LADWP Residential Energy Efficiency Rebate Program. These projects will be showcased at a community event for parents and students (see (iii) below).

Our other strategy for outreach through schools will be to give class presentations/workshops in STEM classes at schools in the district. Through our College of Education’s partnership with NASA JPL and joint work with Discovery Cube LA, as well as the teachers who have graduated through our single and multiple subject programs, we are in contact with over 3000 STEM teachers in the region. We also have active programs working in schools, where students and teachers from those schools are already focused on STEM studies and innovation. Thus, we are able to access STEM classes within local schools and will present the materials we develop to these classes.

Specifically under this proposal we will:

Train and work with 12 ?? STEM middle and high school teachers on educational and outreach materials on water and energy conservation through workshops at CSUN.

Engage 1200 (??) high school and middle school students with education and information pertaining to energy and water conservation through their teachers.

Engage 1200 (??) students in energy or water auditing and efficiency projects that relate specifically to water and energy use in their homes.

Give workshops/presentations in STEM classes to 500 additional students and provide them with information to take home.

(iii) Community Event(s)

We will host one event towards the end of the 2015-16 school year for students and their families in which students will present their energy/water conservation projects. We will recruit judges and award prizes to the top 3 projects in each area for each age/grade range.

(iv) Social media

We will utilize Facebook and our extensive listserves from our College of Education, the Institute for Sustainability, and alumni to announce events (workshops, community event) and provide interesting and engaging facts surrounding water and energy to stimulate interest and reduce water and energy use.

**7. Describe your methodology for measuring actual energy and/or water savings and/or**

**behavior changes resulting from activities proposed. (Peer facilitator applicants: What**

**experience do you have with measuring utility savings and behavior change? What**

**assistance can you offer to the other grantees?)**

We request that LADWPD provide us data on utility bills and rebates within the council district or with address/location data so that we can perform an analysis of utility bills now and after the end of our 12 month grant period to compare the change in utility usage. This will be mapped in a GIS and provide a quantitative assessment of energy and water use change. Additionally if rebate data are provided to us by address or zipcode+4 we will georeferenced that data to examine the number and kind of rebates applied for during the term of our outreach and education program.

We will also track workshop registration and attendance through the Event Brite site that we use to manage our events, and follow up with attendees to find out whether they need assistance or have pursued rebates. Data on these will be collected.

School students who take part in our education program will be given surveys to take home and fill out regarding the type and number of electricity and water consuming devices in their homes. These will serve as part of their auditing exercise. Upon completion of the curriculum and/or project, they will be asked to complete additional survey information regarding energy and water conservation measures they have taken at home. Part of the student exercises will be to quantify associated savings.

We will aggregate these data in assessing our overall impact.

**8. Please list your anticipated costs:**

$45,000 budget minus 26% in indirect costs = $35,700

Workshops: 12 workshops x $500 admin and advertising costs = $6000

Energy Coalition – workshop partners: 12 workshops x $500 participation = $6000

Teacher training and PD: 12 teachers x $500 stipend (one day workshop attendance) = $6000

Teachers: project development + attendance at community event = 12 x $300 = $3600

Presentations/workshops in schools carried out by Institute for Sustainability and STEM/Education faculty: 12 classes x $200 per class = $2400

Development and printing of materials - $5000

Hosting community event – facility rental + staff costs + advertising = $3000

Social media, advertising = $2000

Project prizes: $1,700

***Labor, including hourly/salary rates and overhead costs:***

***Materials (describe):***

***Other, including consultants or partners (describe)***

***Total costs to equal $45,000 or $90,000 (for citywide projects only)***