

CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION

TITLE PAGE

PART A - BASIC INFORMATION

1. PROJECT/PROGRAM NAME: Residential Solar Incentive Program – Phase 2

Amount of Funding Request: ANNUAL: \$50,000 (total funding request)
GRANT PERIOD = 2 YEARS:

Organization and/or Person(s) Submitting Proposal:

City of Benicia

2. ORGANIZATION INFO:

City of Benicia
Organization Name

250 E. L Street
Address

707.746.4276 707.746.1637
Phone Fax

aporteshawver@ci.benicia.ca.us
Email

Federal ID # (for non-profit or business): 94-6000298

If a non-profit organization, the year legally established: _____

State in which established: _____

If a business, the year established, number of years: 1848

Location: Benicia, CA

3. CONTACT PERSON (for this Application)

Name: Alex Porteshawver

Title: Consulting CAP Coordinator

Address: 250 E. L Street

Phone: 707.746.4276 Fax: 707.746.1637

Email: aporteshawver@ci.benica.ca.us

**CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION**

4. The proposed Project/Program will serve FOCUS AREAS of the Benicia Climate Action Plan [CAP] to reduce Greenhouse gases [GHG] and thereby also support Community Sustainability. Please list specific STRATEGIES within the FOCUS AREAS below that will be addressed (fully or partially) by the proposed Project/Program. Include an explanation of the importance of each STRATEGY to the Project/Program's mission. [See CAP page 15 for Focus Areas.]

➤ **EDUCATION/PUBLIC OUTREACH**

Strategy EO-1.3. Educational Workshops

The CAP Coordinator will host a second solar workshop to explain the basics of solar energy, solar photovoltaic (PV) systems, installation options (purchase, lease, PPA), and available rebates and incentives (Marin Clean Energy (MCE) & PG&E).

➤ **ENERGY PRODUCTION**

Objective E-3: Increase Amount of Solar Energy Production in Benicia

Small-scale localized energy production can reduce greenhouse gas (GHG) emissions and save residents money.

Strategy E-3.3. Promote California Solar Initiative and Other Applicable Incentive Programs will be directly implemented through the Residential Solar Incentive Program. Although there are no more available state incentives for the installation of residential solar systems, the City can promote MCE's solar crediting policy (retail rate + \$0.01/kWh) and other comprehensive financing programs, e.g. the City's two Property Assessed Clean Energy (PACE) programs.

➤ **TRANSPORTATION & LAND USE**

Objective T-8: Reduce Reliance on Conventional Automobile Travel

Installing solar may make purchasing an electric car more environmentally and financially attractive since solar energy can be used to charge all electric and plug-in cars, saving money and reducing GHGs through the use of renewable energy.

➤ **BUILDINGS**

Strategy B-3.3. Home Energy and Water Audits

The City will require that the applicant sign up for a no-cost home energy and water assessment through the Benicia Home Efficiency Program (BHEP) or through the Solano County Water Agency (water only). The CAP Coordinator will also work with MCE and the City's PACE programs if the BHEP is no longer available. These audits will identify efficiency opportunities prior to sizing solar systems and provide residents general recommendations to conserve water and energy.

➤ INDUSTRIAL & COMMERCIAL

➤ WATER & WASTEWATER

➤ SOLID WASTE

➤ PARKS & OPEN SPACE

CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION

ORGANIZATION CERTIFICATION: I hereby certify that all information contained in this application and any attachments is true and accurate.

NO CITY EMPLOYEE SHALL BE SIGNATORY ON BEHALF OF AN APPLICANT ORGANIZATION REQUESTING FUNDS FROM THE COMMUNITY SUSTAINABILITY COMMISSION. A CITY EMPLOYEE MAY BE SIGNATORY WHEN APPLYING FOR FUNDS FOR A PROJECT TO BE ADMINISTERED BY THE CITY OF BENICIA.



Authorizing Signature

Community Development Director
Title

5/18/2015
Date

Christina Ratcliffe
Typed Name

**CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION**

PART B – BUDGET INFORMATION **

5. Please provide a budget for the proposed Project/Program. Expenses listed in this document should be consistent with the Project Description. This budget is only for the Project utilizing grant monies.

Do not leave any blank boxes. Use "N/A", if cost category is not applicable.

Note: Column "A" = Total cost of the proposed Project.

Column "B" = Amount requested in this grant application.

Column "C" = The difference between Column A and Column B, or the costs of the Project that are not included in this grant request, if any.

PROJECT DIRECT EXPENSES	TOTAL PROJECT COSTS (A)	GRANT REQUEST AMOUNT (B)	APPLICANT'S OTHER COSTS (C)
Personnel (direct ¹)	\$0		
Personnel (direct ¹)	\$0		
Personnel (support ¹)	\$0		
Benefits (direct ¹)	\$0		
Contract Services	\$0		
Project Supplies	\$0		
Project Equipment	\$0		
Transportation costs: e.g., gas, rental	\$0		
Other Direct Costs	\$50,000	\$50,000	
SUBTOTAL	\$50,000	\$50,000	\$

¹ [Provide names, titles & total estimated annual salary or stipend. Attach additional sheets if needed and summarize total here.]

**CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 – 2016 GRANT APPLICATION**

PART B – BUDGET INFORMATION (continued)

INDIRECT EXPENSES				
Administrative - personnel	\$0			
Benefits	\$0			
Space/office rental	\$0			
Utilities	\$0			
Telephone	\$0			
Office Supplies	\$0			
Transportation (gas, rental)	\$0			
Other Indirect Costs	\$0			
SUBTOTAL	\$0		\$0	\$
TOTAL COSTS	\$50,000		\$50,000	\$

**COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION**

PART B – BUDGET INFORMATION (continued)

6. APPLICANT'S FINANCIAL SOURCES: Please provide sources of other funds for the proposed Project/Program. Total amount should correspond with Total in Column C (from previous page). Do not include your entire budget here. (It should be attached).

Applicant's Sources of Other Funding (be specific)	Amount or Value	Cash or In-kind (indicate)
Solar Installers	TBD	Cash; Matching Rebate (estimated at \$0.60/watt)
TOTAL	\$TBD	\$TBD

7. List any prior City of Benicia grants or loans awarded to your organization and the number of Benicians served with the funds. (If more space is needed to complete your answer, use the reverse side of this page).

Fiscal Year	Project/Program	Amount of City Grant or Loan	Benicians served
2014-15	Community Choice Aggregation Feasibility Study	\$48,000	Benicia electricity customers
2014-15	Parks Department – Irrigation Project	\$199,000	n/a
2014-15	Business Resource Incentive Program	\$500,000	Benicia Industrial Park
2014-15	Turf Replacement Program	\$100,000	Benicia Residents
2012-13	Pump Station #3	\$556,909	Benicia Water Users
2012-13	Business Resource Incentive Program	\$625,000	Benicia Industrial Park

Fiscal Year	Project/Program	Amount of City Grant or Loan	Benicians served
2011-12			
2010-11			
2009-10			
TOTALS		\$	

**CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION**

PART C – PROJECT/PROGRAM ORGANIZATION DISCUSSION
(Please limit Part C to 5 pages)

8. Brief Project/Program Summary (Three to four sentences describing the grant proposal).

This request is to fund Phase 2 of the Residential Solar Incentive Program and offer \$0.30/watt rebate per system installed by Benicia residents. This City rebate would be matched by solar installers at a 'to be determined' amount, likely \$0.60/watt similar to Phase 1.

The CAP Coordinator is also pursuing a group solar purchase with the cities of Walnut Creek and Fremont. This would reduce the cost per system by approximately 10-15% depending on the size of the system and type of panels. Residents interested in receiving this additional discount would have to work with a solar installer identified by Vote Solar (program manager). Vote Solar is a non-profit grassroots organization working to fight climate change and foster economic opportunity by bringing solar energy into the mainstream. Since 2002, Vote Solar has engaged in state, local and federal advocacy campaigns to remove regulatory barriers and implement key policies needed to bring solar to scale. Vote Solar staff in California, Colorado, Florida, Massachusetts, and Pennsylvania.

9. Describe the Project/Program's general purpose and activities:

The Residential Solar Incentive Program's purpose is to reduce GHG emissions by promoting energy efficiency and renewable power. Based on the average size of systems installed in Benicia during Phase 1 (3.7kw or 3,700 watts) and the average cost per watt in California (\$5.47/watt), the rebate will cover approximately 5% of the total system cost. The rebate may cover a larger percentage of the overall cost as the cost of solar panels has come down significantly since the latest solar statistics were published as part of the California Solar Initiative (CSI). The cost may be further reduced if an applicant chooses to participate in the Vote Solar Initiative.

The City's rebate will be matched by solar installers (any installer will be invited to sign an MOU with the City). The lower rebate (\$0.30/watt vs. \$3,000 flat rebate) will allow more systems to be installed and encourage residents to install larger systems. The City will still require that each

system is at least 1.5kw. Finally, the incentive will only be available to those residents who *purchase* the system. Solar leases and power purchase agreements (PPAs) are already structured so that residents have no down payment and monthly lease or energy payments are always less than current energy costs. Purchasing a system still requires residents to secure loans and make an upfront payment; those individuals will be eligible for rebates to off-set that upfront cost.

Total installations will vary depending on the size of the systems. Four (4) residents remain on a waiting list from Phase 1 and will be contacted first as part of Phase 2.

Activities:

- Solar Workshop to educate residents about the benefits of renewable energy and basic installation options including purchase, lease, and PPA options.
- Enroll all applicants in the Benicia Home Efficiency Program (BHEP) (or other equivalent efficiency assessment program) to conduct and an energy/water assessment.
- Promote the City's PACE programs as option for financing solar installations and other efficiency and conservation upgrades.
- Track and report all program activities including GHG reductions.

10. If sponsored by a non-profit or business, list all financial liabilities or pending legal action:

N/A

11. If applying for other grants for fiscal years 2014 - 2015, please list the project, funding source(s), proposed budgets and requested amount(s).

N/A

12a. How much if any money will this project save the organization?

N/A

12b. If costs savings are involved, when do you anticipate this project will pay for itself, if at all?

N/A

13. At what location(s) will the proposed Project/Program take place, and, if applicable, how long has the organization been at this location?

N/A

CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION

PART C – PROJECT/PROGRAM ORGANIZATION DISCUSSION (continued)

14. **What are your proposed hours of operations for this Project/Program? Please indicate hours that actual services will be provided, and how this may or may not differ from the hours project staff will be available to respond to inquiries by phone or email, answer general questions, etc.?**

The CAP Coordinator will manage the program and be available to answer applicant questions and process applications during normal business hours, M-F.

15. **Describe the Project/Program associated with this grant request. Include the goals to be achieved and the strategy that will be used to meet the goals. Be specific when discussing what will be achieved as a result of the proposed Project/Program, with respect to goals of the Benicia Climate Action Plan to reduce GHG emissions.**

Goal 1: Increase the number of residential solar installations.

Consistent with CAP Strategy E-3.3. Promote California Solar Initiative and Other Applicable Incentive Programs.

Strategy

The number of rebates issued will depend on the size of the systems; however, the CAP Coordinator estimates (based on average size of system in Phase 1) that at least 40 new systems will be installed.

Goal 2: Reduce energy-related GHG emissions.

Consistent with CAP Objective E-2: Increase Amount of Renewable Energy in Benicia

Strategy

Phase 1 (34 systems installed) achieved a 40 MT annual reduction or 1,200 MT life time reduction (assuming a 30 year useful life of the systems). This reduction will likely be less in Phase 2 because the MCE emissions factor is cleaner than PG&E's and therefore MCE customers who participate in the incentive program will reduce less emissions. However, each applicant's emissions reductions will be assessed depending on their electricity provider. Off-setting grid power with solar energy will reduce GHG emissions regardless of the provider.

Goal 3: Increase awareness about the City's PACE programs.

Consistent with CAP Strategy E-2.2. Property Assessed Clean Energy (PACE) Program

Strategy

The CAP Coordinator and partnering solar installers will notify applicants of PACE financing opportunities and facilitate the application process and identification of energy efficiency, renewable energy, and water conservation fixtures as part of the solar installation process. It is highly likely that solar installers are also certified contractors for at least one of the City's PACE programs.

Goal 4: Increase awareness of renewable energy and its benefits.

Consistent with Objective E-2: Increase Amount of Renewable Energy in Benicia and Objective EO-1: Increase Public Awareness and Education About Climate Change

Strategy

Hosting a second solar workshop will help residents understand the basics of solar energy including GHG reduction benefits and energy cost savings. In addition, the CAP Coordinator will post information on the City’s website, SustainableBenicia.org, Sustainable Benicia’s and the City’s Facebook page, NextDoor, City water bills, the City Manager’s newsletter, and in local news publications. All of these efforts will increase awareness about renewable energy and encourage residents to consider installing solar at their homes.

16. Please describe why the proposed Project/Program is necessary for citizens of Benicia and the community as a whole?

Reductions in the emissions from energy production and consumption can be achieved by increasing the efficiency of traditional energy sources and increasing the overall share of renewable energy. According to the 2010 Inventory Update, 6% of community-wide emissions come from energy use in the residential sector and encouraging residents to install solar is one way to reduce those emissions and save electricity customers money on their monthly energy bills. In addition, if these residents are MCE customers, they will be credited for excess solar generation at a more financially attractive rate as compared to PG&E (retail rate + \$0.01/kWh). This project will also familiarize residents with financing options for solar and other renewable energy, energy efficiency, and water conservation upgrades (PACE programs).

17. How will outreach be conducted so that services provided will have an educational “ripple effect” throughout the community?

In an effort to leverage marketing and funding resources and provide residents additional incentives to install solar, the City will partner with local solar companies and the Vote Solar program; by partnering with the City, a trusted source of information, solar installation companies could achieve a higher saturation rate and increased workflow. The City will work with installers to complete the following outreach activities:

Social Media	The City will promote the program via Facebook, NextDoor, and Twitter.
Direct Mailers	Installers to create direct mailers explaining the rebate program and the steps required to receive a rebate. The informational flyer featured a simple cost breakdown of a leased or purchased system, including the deduction for the rebate.
Door-to-Door Canvassing	Installers to canvass Benicia neighborhoods to explain the solar rebate program and its matching rebate as well as the basics of solar PV systems.
Farmers’ Market	Installers and the City will be at the farmers’ market to promote the rebate program and answer resident questions about solar PV systems.
Solar Workshop	The City, installers, MCE and PG&E will be invited to participate in an informational workshop to kick off the rebate program.
Sustainable Benicia website City website	Comprehensive program information will be posted on the website for easy access. The rebate application form will be available for download.
Grid Alternatives	The City will attempt again to identify eligible residents to refer to GRID Alternatives (non-profit solar installation company).

**CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION**

PART C – PROJECT/PROGRAM ORGANIZATION DISCUSSION (continued)

17a. List the specific, quantifiable goals of the proposed Project/Program. (Please state the goals in numbers of individuals, families, households or groups projected to be served and then estimate the amount of energy or water savings that may be achieved for each, then total those figures in each category and estimate GHG reduced by the Project/Program over one year.)

ANNUAL GOALS	Numbers served, e.g. individuals, families, households and/or groups	Water & Energy Savings in 1 year	GHG reductions (estimate) in 1 year
At least 40 new residential solar systems	40 households	240,000kWh (estimate based on average production per system (6,000kWh) in Phase 1)	40-50MT CO2 annually (depends on size of system and whether off-setting MCE or PG&E power)

17b. Discuss how this data will be collected, organized and disseminated throughout the community.

The CAP Coordinator will track the following:

- Applicant
- Solar Installer

- Size of System
- Amount of rebate
- Participation in Vote Solar program
- GHG emissions reduced per system and for entire program (dependent on electricity provider)
- Installer Incentive
- Date of Permission to Operate Letter issued by PG&E (proving system is interconnected)
- Staff time needed to process rebate
- Number of residents who attend workshop
- Number of applicants who chose to pursue PACE financing
- How applicant heard of program

During Phase 1, the CAP Coordinator tracked this information internally. Ideally, a file sharing site would be set up where installers could upload rebate documents and share system information. The CAP Coordinator will organize this site and work with installers to properly upload, track, and manage program data.

The CAP Coordinator will share final program results via all of the methods described in response to Question 17. Program results will also be reported to the Beacon Award Program, the Carbon Disclosure Project, and be captured in the City's next GHG Inventory Update.

18. If the proposed Project/Program is an already existing activity, or part of an existing program of the applicant or his or her organization or business, please explain.

N/A

19. Identify similar projects or programs in the community and how the proposed Project/Program differs from them.

There are no other residential solar incentive programs in Benicia; contractors may offer limited time "deals" on installations and may also match the City's rebate. Since conclusion of Phase 1, the state solar rebate (California Solar Initiative) has expired and is no longer available. There is a federal tax credit (30%) still available to those who purchase systems. GRID Alternatives offers low to no-cost solar systems to qualifying low-income individuals, but no qualifying homes were identified during Phase 1. The City's existing PACE programs offer financing options, including 20-year PPAs to finance solar, but no incentives or rebates are included as part of those agreements.

**CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION**

PART C – PROJECT/PROGRAM ORGANIZATION DISCUSSION (continued)

20. REQUIRED ATTACHMENTS: Please verify and check off confirmation indicating that the following required items are attached to the original application.

Do not leave any blank – if an item is not applicable, indicate by “N/A”

Item #	Description	Submitted (verification by City staff)
1	IRS Letter of Tax Exempt Status	N/A
2	Organization's total budget for the current year	N/A
3	Copy of most recent audit or financial statement	N/A
4	Names and addresses of Board of Directors	X
5	List of paid principal staff and positions	N/A
6	Job descriptions for principal staff and personnel <i>to be paid partially or in full with grant funding.</i>	N/A
7	Copy of resolution or board meeting minutes indicating organization's support of the project application.	N/A
8	If a partnership, or involving any collaboration with other group or entity, letters of commitment from each organization indicating degree of participation and a budget showing each organization's financial responsibility to the proposed Project/Program.	X

THANK YOU!

Alex Porteshawver, JD, MELP

Project Manager

Ms. Porteshawver assists communities to implement greenhouse gas emissions reduction projects and programs and increase local resiliency. She has a law degree from Marquette University Law School with a special focus on environmental and sports law and a master of environmental law and policy from Vermont Law School. Ms. Porteshawver combines her academic background in environmental law and policy with real life experience implementing climate action plans and working locally and regionally to develop practical solutions to climate change.

Education

JD | Marquette University Law School

Masters in Environmental Law & Policy | Vermont Law School

BS, Marketing Communication/Management Communication | Emerson College

Relevant Project Experience

* Denotes work or projects completed prior to joining PMC.

City of Benicia, Consulting Climate Action Plan Coordinator. Assisting the City to achieve greenhouse gas reduction and resiliency goals through development of annual work plans and ongoing management of reduction programs and projects. Managed multi-stakeholder process (City staff, elected officials, business community, and Sustainability Commission) to develop annual CAP Implementation Work Plan; tracked ongoing activities. Developed applications and was awarded a California Energy Commission grant (\$80,000) to install a battery-backed electric vehicle fast charger, and a Coastal Conservancy Climate Ready grant (\$150,000) to conduct vulnerability assessment and develop adaptation plan. Managed greenhouse gas (GHG) inventory update. Managed all residential incentive programs (solar and water). Joined the HERO PACE program and managed process to join Marin Clean Energy Community Choice Aggregation. Managed and tracked all funding sources related to project implementation including internal budgeting procedures.

City of San Joaquin, Energy Programs Manager.* Managed PG&E Local Government Partnership (\$180,000 program budget). Benchmarked City facilities using EnergyStar Portfolio Manager. Applied for and managed EECSBG grant; developed model plan for energy-efficient rural housing. Prepared reports for City Council. Assisted with General Plan update.

Legal Clerkships

- National Sea Grant Law Center. Researched state liability for dredged materials in a disposal facility.
- Wisconsin Department of Natural Resources (DNR). Researched various issues related to the Wisconsin Clean Water Act and DNR rules.

Papers/Publications

- Porteshawver, A. 2010. "Under Review: Stadium Construction and State Environmental Policy Acts." *Marquette Sports Law Review*, 21, 339.
- Porteshawver, A. 2009. "Why Adopting New Green-Building Policies Will Improve the Environment and the Community." *Marquette Sports Law Review*, 20, 241.
- Showalter, S., A. Porteshawver, and J. Tahtinen. 2010. "Converting the Erie Pier Confined Disposal Facility to a Processing and Reuse Facility: Is an Interstate Compact a Necessary Component?" *Journal of Maritime Law & Commerce*, 41, 197.

