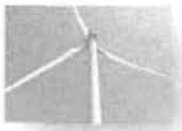
blue planet FOUNDATION





SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION
February 7, 2013, 2:45 P.M.
Room 225
(Testimony is 7 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 1330

Chairs Gabbard and Baker members of the committees:

The Blue Planet Foundation strongly supports SB 1330, establishing a community-based renewable energy program to expand the number of Hawaii residents who can participate in the benefits of clean energy. This measure would allow residents to invest in and benefit from solar and wind energy systems—even if those systems are not sited on their property.

House Bill 728 makes renewable energy accessible for many Hawai'i residents, businesses, and agencies who cannot currently take advantage of energy cost savings available from solutions like rooftop solar photovoltaic energy. Community-based renewable energy boosts private investment in our green energy infrastructure while it maximizes the flexibility of our clean energy solutions. In doing so, it benefits all Hawai'i residents by reducing the amount of money we send out of the state to pay for imported fossil fuels.

Our current system leaves many Hawaii households, businesses, and public agencies unable to participate in renewable energy cost savings

Many homeowners have been able to use solar power and other technologies to break free from energy costs being driven upward by fossil fuels. Unfortunately, many individuals and households are currently unable to directly participate in renewable energy because of their location, building type, access to the electric utility grid, or other impediments. For example, (a) it may be difficult for a single condominium owner to install solar panels, without a wider installation on behalf of the entire condominium; (b) it may be difficult for homeowners with shaded roofs to harness as much of the sun's energy as their neighbors; or (c) a homeowner may find that the utility is limiting the amount of energy from the homeowner's particular circuit. All of these situations can be addressed with community-based renewable energy.

info@blueplanetfoundation.org
55 Merchant Street 17th Floor • Honolulu, Hawai'I 96813 • 808-954-6142 • blueplanetfoundation.org

Community-based renewable energy unlocks renewable energy solutions, improves our economy, and benefits our electrical grid

Community-based renewable energy allows residents to join together to find energy solutions. For example, several condominium owners in different buildings may collectively install solar panels in another location with spare rooftop capacity. Even larger communities can join together to install renewable energy in ways that are most effective and efficient for their particular community. Or public agencies, such as schools, colleges, universities, and local governments will have more flexibility to access renewable energy across their systems. The cost savings can benefit important educational programs, social services, and new hiring.

Community-based renewable energy can also help make our energy system more robust, by evening out the distribution of renewable energy on the grid. For example, homeowners on a crowded circuit can install solar panels on another circuit, and receive the credit against their energy bill. By promoting renewable energy on under-utilized circuits, it can help the utility to operate our electrical system more effectively and efficiently. In addition to these benefits, group net metering creates new construction jobs, stimulates the economy, reduces emissions of greenhouse gases, promotes energy independence, and will assist in meeting the state's clean energy goals.

Community-based renewable energy is spreading across the country—don't let Hawaii fall behind

Community-based renewable energy is an innovative solution that is already happening in other states, such as California, Colorado, Massachusetts, Washington, Maryland, and Maine.[1] There is no reason Hawaii shouldn't enable its residents to do the same thing.

For all of these reasons, it is in the public interest to promote this type of broader participation in self-generation by Hawaii residents, public agencies, and businesses. For wealthy homeowners with large roofs, solar electricity is a no-brainer. But for most residents, solar power is simply out of reach. The policy proposed in SB 1330 brings some social equality to our clean energy policy. Everyone should be able to participate in Hawai'i's clean energy future.

We respectfully request that SB 1330 be forwarded for further consideration.

Thank you for the opportunity to testify.

The following pages contain an "FAQ" on community-based renewable energy and a 4-page brief reviewing some case studies of successful community-based renewable energy programs.

[1] The U.S. Dep't of Energy's National Renewable Energy Laboratory has reported on elements of these programs, http://www.nrel.gov/docs/fy11osti/49930.pdf.

Community-based renewable energy FAQ

Q: Why is community-based renewable energy necessary?

A: While solar has been an incredible success story in Hawaii, the majority of residents simply cannot directly participate in renewable energy because of their lack of access to a suitable rooftop for solar, such as many of the 40% of residents who live in multi-unit housing such as condos, or those whose roofs are shaded or otherwise incapable of supporting solar. Community-based renewable energy allows residents to invest in and benefit from solar and wind energy systems—even if those systems weren't directly on their property. It's a matter of fairness and equality. Everyone should be able to participate in Hawaii's clean energy future, not just those fortunate enough to have a big roof over their heads.

Q: What are the benefits of community-based renewable energy?

Aside from making Hawaii's clean energy policies more equitable, community-based renewable energy can bring real economic value to those who need it the most. Under California's Multifamily Affordable Solar Housing program (established in 2008, now with 7 MW installed, and 13 MW signed up), community based renewable energy is estimated to save low income households 30% on their electric bills.

Q: Is anyone else doing community-based renewable energy?

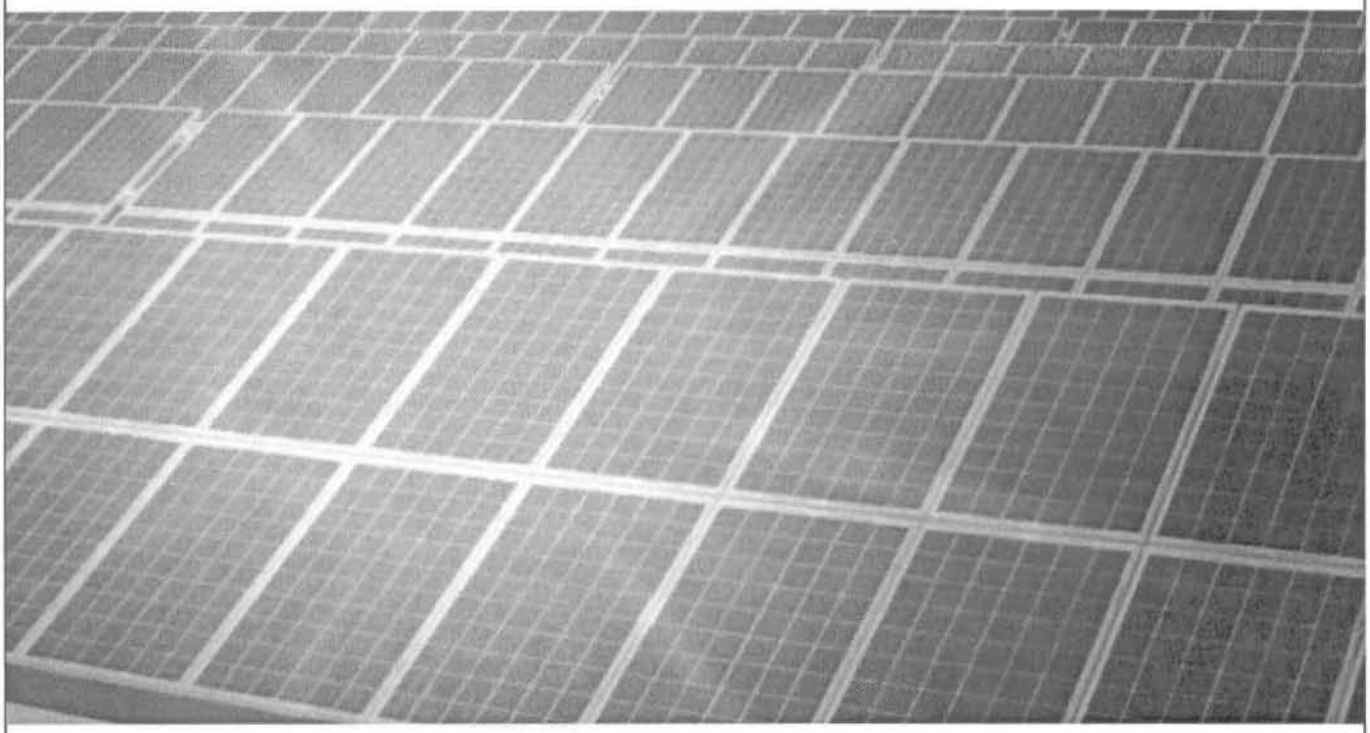
A: Yes, as of November 2010, utilities, public utility commissions, and communities in California, Florida, Arizona, Utah, Colorado, Washington, Vermont, Massachusetts, Maryland, and Maine had all taken steps to adopt innovative community based renewable energy programs. According a report by the U.S. Dep't of Energy National Renewable Energy Laboratory (NREL), the Interstate Renewable Energy Council (IREC) examined "the various community solar approaches that have been implemented thus far," to develop "model" rules for community based renewable energy programs. These model rules could be used to develop a program for Hawaii.

Q: Aren't there other approaches to solve the same problem of lack of access to renewable energy?

A: Yes, there are, such as a utility-sponsored "green pricing" program. But this is not available in Hawaii and there are no current plans to make such a program available. Moreover, a community-based renewable energy program would empower residents to take control of their energy situation with their own resources, leveraging the efficiency of efficiency of the market.

COMMUNITY-SHARED SOLAR

DIVERSE APPROACHES FOR A COMMON GOAL



Community-shared solar gives energy consumers who may not be able to or want to install on-site renewable generation the opportunity to enjoy the benefits of solar generation. These three short case studies are intended to offer a glimpse at three different utilities' approaches to offering community solar to their customers. We look at an investor-owned utility, a municipal utility and a cooperative utility to get a sense of the variety of ways to provide energy consumers the chance to participate in solar generation.

December 2012

SunShot U.S. Department of Energy

IREC Interstate Renewable Energy Council

Tucson Electric Power: Bright Tucson Community Solar Program

One of Bright Tucson's community solar arrays. Photo courtesy of TEP.

Program Summary

Program Type	Investor-owned utility
Program Location	Tucson, AZ
Program Size	Currently 4.13 MW
Participation	777 customers (as of July 2012)
Generation ownership	TEP and third-party developers
Eligible Participants	All customers except those currently enrolled in net metering
Participant Buy-in	Purchase 150-kWh monthly blocks for a surcharge of $3/block/month
Participation Term	20 years, though customers may choose to drop out earlier
Web Site	https://www.tep.com/Renewable/Home/Bright
Contact	Marc Romito, mromito@tep.com

Tucson Electric Power (TEP), an investor-owned utility in Arizona, offers community-shared solar power to their customers. Through TEP's Bright Tucson Community Solar program, customers can purchase output from a TEP- or third-party-owned solar facility in 150-kilowatt-hour (kWh) monthly blocks, each for a fixed $3 per month. In other words, each block purchased by a customer will add $3 to their monthly electric bill. However, program blocks are exempt from future rate increases on the energy portion of the bill and two surcharges applied to other electric usage, the Renewable Energy Standard Tariff (REST) and the Purchased Power and Fuel Adjustment Clause (PPFAC), so the actual cost impact on the customer may be lower.

Blocks of solar energy purchased through the program are associated with a specific TEP service address and cannot be transferred if the customer moves. If program blocks are still available, however, the customer can subscribe to the program again at their new TEP service address. Customers may stop participating at any time and not incur a penalty.

The TEP program was launched in March of 2011, with an initial goal to develop 1.6 megawatts (MW) of new TEP-owned solar generating capacity over the following three years. The program has been much more successful than originally planned. As of July 2012, the TEP Bright Tucson program included 777 customers, which were subscribed to a total of 4.13 MW in TEP- or third-party-owned solar installations. These Bright Tucson blocks produce a total of 619,950 kWh per month.

Colorado Springs Utilities: Community Solar Gardens Program

Program Summary

Program Type	Municipal utility
Program Location	Colorado Springs, CO
Program Size	2 MW (for pilot)
Participation	289 participants (as of October 2012)
Generation ownership	Third-party developers
Eligible Participants	All residential customers and educational facilities
Participant Buy-in	Panels may be leased or purchased at varying rates, depending on the project
Participation Term	20 years
Allocation of Benefits	By bill credit, fixed at $0.09/kWh
Web Site	www.csu.org/residential/customer/Pages/Community-Solar-Gardens.aspx
Contact	Rich Swope, 719-668-5760, rswope@csu.org

Colorado Springs Utilities
It's how we're all connected

In 2010, the Colorado Springs, Colorado City Council voted to allow its municipal utility, Colorado Springs Utilities (Springs Utilities), to offer community solar gardens to utility customers. Currently, through the solar garden projects, Springs Utilities customers may lease panels from one of two community solar project developers, Sunshare (http://mysunshare.com) or Clean Energy Collective (www.easycleanenergy.com). A customer must have a minimum solar garden interest of 0.4 kW. Subscribing customers receive a fixed credit of $0.09/kWh on their electric bill for their share of the power generated by the panels they lease. In 2012, Springs Utilities is providing subscribers a one-time, $1.80 per watt incentive up to 30 percent of their solar garden investment. Incentives are paid on a first-come, first-served basis and subject to availability of funding.

As of October 2012, Springs Utilities had 288 residential customers and one educational customer already participating in its program (with 538 panels purchased). In addition, Springs Utilities has a number of applicants to the program awaiting review and approval, including 51 residential customers and three educational customers (one with 250 panels and two with 925 panels).

Existing Solar Garden Participation – Residential (October 2012)

	Number of Panels					
	2 to 10	11 to 20	21 to 30	31 to 40	41 to 50	51 to 60
Number of Customers	237	32	16	2	1	0
Weighted Average Number of Panels	4.1	15.6	24.4	35	48	0
Number of Customers (proposed)	41	7	1	1	0	1
Weighted Average Number of Panels (proposed)	4.2	17.1	28	32	0	55

Florida Keys Electric Cooperative: Simple Solar Program

Program Summary

Program Type	Cooperative utility
Program Location	Upper and Middle Florida Keys, FL
Program Size	117.6 kW (2 arrays)
Participation	10 members (as of November 2012)
Generation ownership	FKEC
Eligible Participants	All members
Participant Buy-in	Lease panels at $999/panel
Participation Term	25 years
Allocation of Benefits	By bill credit at full retail rate
Web Site	http://www.fkec.com/Green/simplesolar.cfm
Contact	TJ Patterson, 800-858-8845 x 127, tj.patterson@fkec.com

In 2008, the Florida Keys Electric Cooperative (FKEC) opened the Simple Solar community solar program to its members in the middle keys. The Simple Solar Program was designed for FKEC members who support alternative energy but do not want to undertake designing, permitting, building, maintaining and insuring their own residential solar arrays. FKEC members can lease panels in one of two FKEC PV community solar arrays—the 96.6-kW Marathon Array (552 panels) and the 21-kW Crawl Key Array (120 panels). In return for leasing one or more panels for $999 each, members receive monthly bill credits for the full retail value of the electricity generated by their leased panel(s) for 25 years. FKEC estimated that each 175-watt panel would generate approximately $36 in bill credits in the initial year. Assuming a three-percent annual increase in the retail price of electricity, the $999 investment per panel would return an estimated $1,280 in total credits.

FKEC currently has 10 participants leasing 11 panels through the Simple Solar program. The remaining electricity generated by the arrays is fed into the grid and supplements energy FKEC provides for its members. The two arrays jointly provide enough generation to power about 20-25 houses per year. FKEC retains ownership of the Renewable Energy Credits (RECs) produced by the system.

An interesting outcome of the program has been FKEC's rebate program that resulted from its Simple Solar program. In return for installing its community solar arrays, FKEC received a rebate from the state of Florida in the amount of $43,000. FKEC then turned around and used the entire state rebate to create an incentive program that is designed to spur residential energy improvements for its members. As of May 2012, FKEC members can receive a maximum rebate of $1,000 for energy improvements to their homes. The co-op has given out 162 energy improvement rebates as of November 2012.

FKEC's Marathon Array (left) and Crawl Key Array (above). Photos courtesy of FKEC.

2/7/2013	**Senate Committees on Energy & Environment, Commerce and Consumer Protection**	**ENE/CPN**
2:45 p.m.		**SB 1330**

TESTIMONY IN SUPPORT

Aloha Chairs Gabbard and Baker; Vice Chairs Ruderman and Galuteria; and Members of the Committees:

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We respectfully request that SB 1330 be forwarded for further consideration. An additional FAQ sheet regarding community-based renewable energy is also attached for your reference.

Thank you for the opportunity to testify.

Mark Duda
President, Hawaii PV Coalition

The Hawaii PV Coalition was formed in 2005 to support the greater use and more rapid diffusion of solar electric applications across the state. Working with business owners, homeowners and local and national stakeholders in the PV industry, the Coalition has been active during the state legislative sessions supporting pro-PV and renewable energy bills and helping inform elected representatives about the benefits of Hawaii-based solar electric applications.

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SB1330
Submitted on: 2/7/2013
Testimony for ENE/CPN on Feb 7, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Gina Franchini	Individual	Support	No

Comments: