



GEMS (Green Energy Market Securitization) Program Frequently Asked Questions

What is GEMS?

The GEMS (Green Energy Market Securitization) Program is the State of Hawaii's innovative green infrastructure financing program designed to make clean energy improvements affordable and accessible for a broader cross-section of Hawaii's consumers. Gov. Neil Abercrombie signed Act 211 on June 27, 2013 authorizing the creation of GEMS. The Hawaii Public Utilities Commission on Sept. 4, 2014 issued an order permitting the State of Hawaii to issue \$150 million of Green Infrastructure Bonds to fund GEMS. The PUC on Sept. 30, 2014 issued a second order allowing the State Department of Business, Economic Development and Tourism/Hawaii Green Infrastructure Authority to launch the GEMS program.

Why GEMS?

The upfront costs of installing PV panels and other green infrastructure equipment are a barrier preventing a significant number of electric utility customers from participating in Hawaii's clean energy transformation. While the state has seen early success in clean energy deployment, existing programs may not serve the entire spectrum of Hawaii's communities. In particular, DBEDT has identified a group of underserved consumers that includes renters, non-profits, and homeowners who have been locked out of traditional financing for clean energy installations. GEMS was created to bridge that market gap and bring financing for clean energy into reach for a wider audience.

How does GEMS work?

GEMS uses a market-based financing mechanism to make low-cost capital available for clean energy loans that might not otherwise be provided by traditional lenders. The ability of GEMS to tap a huge pool of institutional bond investors allows the program to reduce financing costs for clean energy installations by minimizing overhead expenses and taking advantage of economies of scale. Consumers who borrow from GEMS to make clean energy investments will see electricity bill savings on day one, with no money down.

What kinds of clean energy installations can be financed with GEMS?

Initially, GEMS will provide financing for distributed solar and other technologies that support PV interconnection, such as energy storage, advanced inverters and monitoring devices. Because GEMS supports grid-enabling technologies it has the potential to help mitigate some of the interconnection issues that have slowed new PV installations.

What are some of the other potential uses for GEMS?

GEMS could eventually be used to support other proposed clean energy technologies such as utility grid modernization, utility renewable integration commercial energy efficiency, technologies that incorporate a water-energy nexus, including sewage and waste water treatment, heating, ventilating, and air conditioning ("HVAC") and related systems, and LED systems.

Will GEMS compete with conventional financing sources?

No. In addition to using traditional lending criteria GEMS will use non-traditional methods to expand clean energy lending into markets that are not served by conventional lenders. Alternative lending criteria may include consideration of factors such as utility bill repayment history and the net bill savings expected from a specific clean energy technology. Traditional lending practices do not take into consideration energy savings from the clean energy installations, even if that installation results in positive cash flows or “income” for the borrower.

Who pays for the bonds issued by GEMS?

Bond holders will be repaid by a PUC-approved Green Infrastructure Fee on utility bills that is estimated to be \$1.29 a month for residential customers. By assessing the fee on all utility ratepayers the bonds will achieve the highest possible credit rating, which in turn lowers the amount of the fee. The Green Infrastructure Fee will be offset by a reduction on the Public Benefits Fee currently on electric bills, resulting in little or no impact to the vast majority of ratepayers.

How does GEMS fit with on-bill financing?

GEMS provides the funding used to make clean energy loans to underserved consumers. On-bill repayment is a separate program being created by the PUC that will allow GEMS participants and others pay for their clean energy installations through their utility bills.

How is GEMS groundbreaking?

What makes GEMS pioneering is that the program combines two financing methods, a traditional rate-reduction bond structure and on-bill financing, in a synergistic model. This innovative structure can open the door for a whole new financing market in renewables and energy efficiency. Although the GEMS program was “invented in Hawaii” to serve Hawaii residents and businesses, the program has drawn national attention and could potentially serve as a model for other states.

What’s next?

The GEMS bonds were sold in November, providing the capital necessary to make the clean energy loans. The Hawaii Green Infrastructure Authority, through its deployment partners, is on track to begin making loans to nonprofit organizations by early 2015. Loans to homeowners and renters are scheduled to begin shortly after that.

For more information on GEMS please visit the Hawaii State Energy Office’s website at energy.hawaii.gov or contact our office at 808-587-3868.

