Department of Commerce

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Washington State Energy Office

UPDATE: Clean Energy Fund 2 (2015-17)



Clean Energy Fund 2: 2015-17 Appropriation

The 2015 Legislature **appropriated \$40 million** to Clean Energy Fund (CEF) 2. CEF2 programs have incorporated stakeholder outreach and advisory panel input into the goals, solicitation and outcomes of the program. These funds build on the concepts developed in CEF1 to provide "a benefit to the public through development, demonstration and deployment of clean energy technologies that save energy and reduce energy costs, reduce harmful air emissions, or otherwise increase energy independence for the state."

- Energy Revolving Loan Fund Grants (\$13.6 million) Provides competitive grants to lenders to create loan programs to implement proven building energy efficiency and renewable energy technologies in residential and business projects. Funds allow lenders to leverage private financing. Additional funding was recently allocated to this program and a competitive grant cycle is expected to occur in Summer 2018.
- Grid Modernization Grants to Utilities (\$13 million) Matching grants to advance integration of renewables through energy storage and information technology, improved reliability, and reduced costs of intermittent renewable or distributed energy.
- Research, Development & Demonstration Matching Fund Grants (\$10 million) Matching grants to support clean energy research and development projects awarded from competitive solicitations.
- **Credit Enhancement Grants** (\$200,000) Provides reimbursement of up to 80% of interest payments for qualifying Washington Economic Development Finance Authority-backed loans for the development of new or expansion of existing in-state renewable energy manufacturing.

About half of CEF2 is yet to be expended. It is estimated that the funds provided in CEF2 will directly generate as many as 430 jobs.

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Our Mission

Grow and improve jobs in Washington State by championing thriving communities, a prosperous economy, and sustainable infrastructure.

Highlights from the 2015-2017 Clean Energy Fund 2

Energy Revolving Loan Fund (\$13.6 million)

- Craft3 (\$4.2M) for commercial and residential loans
- Puget Sound Cooperative Credit Union (\$4M) for residential loans
- WA State Housing Finance Commission (\$1.5M) for residential loans

Grid Modernization Grants to Utilities (\$13 million)

- Avista (\$3.5M) for a micro transactive grid project
- Energy Northwest (\$3M) for the Horn Rapids Solar, Storage & Training Project
- OPALCO (\$1M) for an energy storage system
- Seattle City Light (\$1.5M) for a resilience focused micro-grid
- Snohomish PUD (\$3.5M) for a micro-grid & clean energy technology center

Research, Development and Deployment Matching Fund Grants (\$10 million)

- Composite Recycling Technology Center (CRTC) (\$1.7M) to demonstrate viable commercial processes for recycling carbon fiber
- Edaleen Cow Power (\$273K) for an advanced solids and nutrient recovery system converting manure into fertilizer and cow bedding.
- Impact Bioenergy (\$550K) to demonstrate conversion of food waste into biogas
- Janicki (\$283K) for a bio-digester that will produce clean water and renewable natural gas and from farm waste.
- Polydrop (\$449K) for conductive polymer additives to improve the fuel efficiency of vehicles and planes
- Microsoft (\$675K) for fuel cells in a data center environment
- Oscilla Power (\$1M) to build and test community scale wave energy conversion
- Dresser Rand (\$870K) will test HydroAir[™], a variable radius turbine system that generates electric power from ocean waves
- Demand Energy (\$630K) to develop a platform that will help evaluate new battery technologies and optimize renewables and energy storage
- Battery Informatics (\$135K) for next generation lithium ion battery management systems to maximize battery efficiency
- SuperCritical (\$283K) is developing ways to use supercritical carbon dioxide (sCO2) instead of steam to generate electricity
- Zunum Aero (\$800K) will develop the first commercial-class hybrid aircraft
- Battelle (Pacific Northwest National Lab) (\$2M) to further develop transactive technology allowing building owners to dynamically control energy use

Credit Enhancement Grants (\$200,000) – This program provides up to 80% interest reimbursement for qualified loans approved by the Washington Economic Development Finance Authority for economic development bonds.



Benefits from the Clean Energy Fund:

- The state's \$40 million investment in the Clean Energy Fund is expected to leverage more than \$84 million in matching funds from industry partners for each round.
- Those investments are making buildings more energy efficient, manufacturing smart grid equipment, and adding capacity to the state's electrical grid.
- New grid technologies, developed and deployed in Washington, are now positioned to sell into rapidly growing global markets

