

# Washington State's Clean Energy Fund

## Office of Economic Development and Competitiveness

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Washington State  
Department of  
**Commerce**

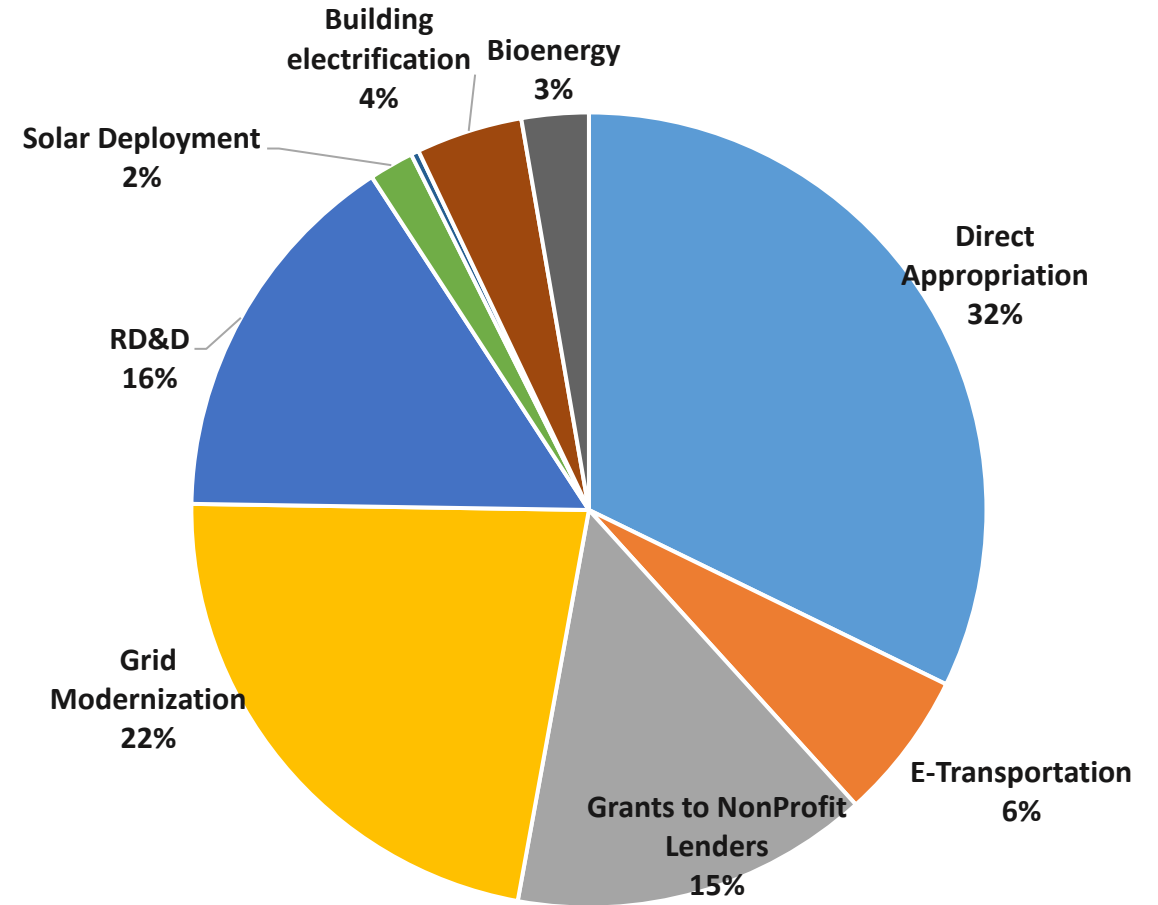
# Vision for the Clean Energy Fund



- **Operationalize Equity** - Design grant programs in **partnership with communities**. Ensure opportunities are responsive to local energy challenges, priorities, and needs. Support community capacity to envision clean energy projects, apply for grants, and build clean energy solutions that work locally.
- **Maximize Federal Funding** - provide **flexibility** to CEF work streams so Commerce can **align with emergent federal funding**. Use CEF as match to enable less-resourced utilities and communities to **accelerate adoption of emerging technologies**.
- **Accelerate Innovation** - maintain Washington's reputation as an **innovation hub** as we deploy proven technology more broadly and advance our proven track record of **building companies and developing ground breaking technologies** (Group 14, Modern Electron, Promus Energy).

# 10 years of investments in clean energy

- **\$231M** invested through CEF since 2013 to develop and deploy clean energy technologies in Washington that benefit the public
- **\$38M** invested in **29 grid modernization projects** to date, including first of a kind microgrid demonstration projects in the state
- **\$26M** invested in **33 RD&D projects** in emerging clean energy technologies, partnership with labs
- **\$120M** invested in **57 projects** supporting **bioenergy, maritime and transportation electrification, clean energy lending, solar deployment**



# 23-25 Capital Budget: CEF \$60M

Title	Short Description	FY 24 - FY 25
<b>Tribal Energy Projects</b>	New program to be developed in partnership with tribes to support planning and predesign work, project predevelopment, and implementation of tribal clean energy projects.	\$10 M
<b>RD&amp;D</b>	Strategic research and development on new and emerging clean energy technologies that can accelerate achievement of state, national and international climate goals.	\$12 M
<b>Grid Modernization</b>	Transforming energy demand and supply interactions on the distribution grid. Projects advance transmission and distribution control systems, support integration of renewables and electric vehicle charging, and implement microgrids and district heating solutions.	\$20 M
<b>PNNL</b>	Direct appropriation to Pacific Northwest National Laboratory (PNNL) to co-invest with DOE on clean energy research priorities.	\$8 M
<b>Federal Match</b>	Grants that enable local organizations, research institutions, companies, and utilities to develop and implement emerging clean energy technology projects in Washington state through federal grants.	\$10 M

# Clean Energy Fund

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- Eligible activities:
  - predevelopment, design, and construction
  - provide a public benefit through research, development, demonstration, or deployment of clean energy technologies that save energy and reduce energy costs, reduce harmful air emissions, or increase energy independence for the state.
  - Projects must be consistent with the state energy strategy
- Eligible entities:
  - local governments, federally recognized tribal governments and tribes' contracted service providers, public and private utilities that serve retail customers in the state, for-profit entities, research institutions, nonprofit organizations, and state agencies.
- Priority for projects that benefit vulnerable populations, overburdened communities, and tribes. Commerce is required to invite stakeholders to participate in the design and implementation of grant programs and must consider equity and environmental justice when developing the program structure

# CEF RD&D Program

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- **Research, Development, Demonstration Grants - \$12,000,000**
- Strategic research, development, and demonstration of new and emerging clean energy generation and storage technologies and climate change mitigation technologies, including greenhouse gas removal.
- Must reduce reliance on fossil fuels, reduce risk of irregularities in power supply, offer opportunities for economic and job growth, and strengthen technology supply chains.
- Intended to catalyze diverse new technologies that change production, use, storage, and transportation of energy.
- Funding for projects at various stages of readiness, including early-stage research, pilot and demonstration projects, and dual use projects that produce clean energy and additional benefits.

# Innovative CEF projects operating in communities across WA

Project and Location:	Clean Energy Fund investments
 <p>Arlington: Microgrid</p>	<p>\$3.5 million for a <b>microgrid</b> that supports grid resiliency. Demonstrates grid benefits of intelligent solar controllers, energy storage and vehicle-to-grid systems. This project is novel in achieving seamless islanding from the grid. Snohomish PUD’s onsite clean energy center hosts regular education opportunities to increase awareness of microgrids and the CEF <b>grid modernization</b> program.</p> <p>Photo: Snohomish Public Utility District’s logo on the Clean Energy Center building in Arlington.</p>
 <p>Yakima: Anaerobic digestion</p>	<p>\$1 million for a feasibility study on <b>research and development</b> of new <b>anaerobic digestion</b> capacity for processing food waste. The city will partner with a non-profit and/or university to conduct and coordinate research, investigations, training, surveys, and public education programs related to planning for anaerobic digester operations for waste management in Yakima County.</p> <p>Photo: Photo of an anaerobic digester container draining into a wetland. Source: Creative Commons, U.S. Department of Agriculture.</p>
 <p>Tacoma: RD&amp;D for hydrogen fuel</p>	<p>\$1.5 million to demonstrate how recycled carbon dioxide, water, and clean electricity can be converted into <b>hydrogen fuel</b> to replace diesel-powered generators. This keeps refrigerated cargo containers cool while waiting to leave the Port of Tacoma. The reduction in diesel reduces carbon emissions, airborne particulate and noise. This <b>RD&amp;D</b> project includes many state and global partners.</p> <p>Photo: Cranes and storage containers at the Port of Tacoma. Source: Creative Commons, Sea Cow</p>
 <p>Lummi Nation: Low Income Community Solar</p>	<p>\$600,000 to install 348 kW of <b>solar</b> on the Lummi HeadStart and Administration buildings. The energy savings will lower the energy burden of the Lhaq’temish Foundation, which <b>serves 15 school, nonprofit and tribal programs</b>. The project supports workforce development, cultivates community engagement in energy planning, and is part of a larger strategy towards energy and economic self-sufficiency.</p> <p>Photo: Solar panels in a field with sun in the background. Source: Adobe stock photo</p>
 <p>Decatur Island: Battery Storage</p>	<p>\$1 million for a <b>battery storage</b> project with Orcas Power &amp; Light Coop (OPALCO). The 1 MW battery is paired with a community solar array to form a microgrid that can operate independently from the grid. This CEF <b>grid modernization</b> project provides local energy resilience for a remote island community and demonstrates demand charge and transmission charge reduction. It also enabled deferral of a submarine cable replacement.</p> <p>Photo: Solar panels located in the center of Decatur Island at OPALCO’s transmission substation</p>

# Thank you!



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