Energy and Climate Policy Advisory Committee
Clean Energy Fund Review and Recommendations
BACKGROUND DOCUMENT

Introduction

Washington's Clean Energy Fund (CEF) was created through the 2013 capital budget. The fund has been replenished through a series of biennial budget bills up to and including appropriations in the 2019 capital budget.

Since 2013, CEF funds have been used to strengthen our state's communities and economy by investing and leveraging millions of dollars in clean energy technology and infrastructure. In recent years, Washington's energy landscape has shifted with the adoption of aggressive climate goals. Our economy has changed dramatically with the impact of COVID-19. In the coming years, the 100% clean electricity goal of the 2019 Clean Energy Transformation Act combined with the state's aggressive greenhouse gas reduction targets will cause ongoing change to Washington's energy landscape and transformation of an essential service, electricity.

In the long term, the CEF has a structure that can help support the innovation and infrastructure adaption that will be necessary to this transition. In the short term, CEF investments can provide a proven opportunity to put skilled workers and businesses to work.

Background: Energy and Climate Policy Advisory Committee

A proviso in section 23 of the Clean Energy Transformation Act directs the Department of Commerce to convene the Energy and Climate Policy Advisory Committee (ECPAC) "to develop recommendations to the legislature for the coordination of existing resources, or the establishment of new ones, for the purposes of examining the costs and benefits of energy-related policies, programs, functions, activities, and incentives."

At a minimum, the proviso states that the committee include representatives of each the state's public four-year institutions of higher education, the Pacific Northwest National Laboratory, and the Washington state institute for public policy. The proviso directs Commerce to submit the committee's recommendations in a report to the Legislature by December 31, 2020. The section expires January 1, 2021.

Due to the limited time available, and to ensure that the effort and outcome result in a product useful to the Legislature and the state generally, the work of the ECPAC will focus on a review of the CEF programs. The committee as a whole will meet roughly three times between June and September, learning about past uses of the funds and considering ideas to expand or change the CEF programs. Interim stakeholder sessions and conversations will be held to focus

discussion on the three primary CEF program areas and related investments. The resulting written recommendations will inform legislative ideas for the 2021 session.

Commerce will convene ECPAC and the related stakeholder sessions, facilitate the meetings, draft and finalize the report, and present it to the Legislature. Parallel with the work of the ECPAC, Commerce is leading the effort to develop the 2021 State Energy Strategy. Crafted with wide input and a technical foundation, the strategy will lay out recommendations to align the state's policies and actions with the updated greenhouse gas reduction targets and the requirements of the state's 100% clean electricity laws while rebuilding Washington's economy. Commerce will take steps to coordinate the work of ECPAC with the strategy development process. Both are on the same timeline and integration of the two efforts is a practical way to leverage resources.

CEF Background

The CEF has its roots in Initiative 937 adopted by Washington voters in 2006 and later codified as the Energy Independence Act. That law required electric utilities to include renewable sources in their portfolios. To do so, utilities needed to integrate distributed, variable and intermittent resources, something they did not have experience with and that required investment in innovation outside of their traditional business model. There were only limited grid modernization efforts globally and significant barriers to implementation in the state. Coming out of the economic recession in 2008, the state and federal government made investments in energy technologies. The 2012 Washington State Energy Strategy recognized the continuing need to support innovation to foster a clean energy economy and jobs, and to adjust to the changing energy landscape. The need will be reflected again in the 2021 State Energy Strategy currently under development.

In 2013, the Inslee Administration came in on the heels of the recession with a strong climate vision. At the Governor's request, the CEF was set up in section 1074 of the 2013 capital budget with the strategic goal of "developing, demonstrating and deploying clean energy technology that save energy and reduce energy costs, reduce harmful air emissions, or otherwise increase energy independence for the state."

CEF Fund Distribution 2013-2020

Since 2013, Washington's CEF investments have leveraged hundreds of millions of dollars to support innovative projects in grid modernization and storage; financing energy efficiency and renewable energy in low-income communities; wind, solar and other renewable energy projects; and the electrification of transportation including vehicles, vessels, and aircraft. The funding has resulted in energy savings, prevented emissions of greenhouse gases, allowed the state to be a leader in clean technology development, and supported jobs in the energy sector.

With slight variations from budget to budget, and in addition to a number of one-off projects, the CEF has been invested in of three primary program areas:

1. **Research, Development, and Deployment**—funding strategic research and development projects on new and emerging technologies. There is an evolutionary history for this program. It initially started as the Federal Match program which was targeted to a narrow set of research organizations (e.g., PNNL, UW, WSU, BPA) for activities not covered by those pre-commercialization demonstration projects being proposed by the electric utilities (see Grid Modernization below). It later became the RD&D program which was made available to wider categories of private and public organizations involved in clean technology development.

2. **Grid Modernization**—funding integration of renewables onto the grid. This program was initially focused on helping several of the larger electric utilities with implementing field demonstrations of emerging and promising grid scale battery energy storage technologies to support the integration of intermittent renewable energy. Subsequent investments have included projects to combine emerging energy storage technologies with distributed generation (mostly PV solar). Most of these also included advanced microgrid controls for providing resiliency benefits along with higher levels of integration into utility operations.

3. **Grants to Non-Profit Lenders**—offering revolving loans to homeowners and commercial building owners to install renewable energy systems and make efficiency upgrades. Initiated during the great recession, this program was designed to provide inexpensive capital to lenders to deploy tried-and-true green technologies in low-income communities. The program enables non-profit lenders to create a revolving loan fund to finance energy efficiency and renewable energy loans to consumers who otherwise lack capital necessary to make the energy investment. The loans never exceed 50 percent of the value of the project.

CEF investments are matched at least 1:1 by non-state funds, effectively doubling the state's investment. In many cases, the match has been 3:1 or higher. As of the beginning of 2020, grants given in the programs' lifetimes were:

Grid modernization: $40.7 million
RD&D: $32 million
Nonprofit lenders: $31.2 million
Electrification of transportation systems: $11 million
Solar deployment: $4 million
Direct appropriations and other programs: $35.4 million

The structure of the CEF programs is partly a product of sideboards created by direction and funding in the series of CEF legislative appropriations. It is also a result of Commerce's

interpretation of the most effective and prudent way to configure the programs and allocate the funding.

The Future of the CEF

The Legislature has historically directed where state dollars are allocated from the CEF, maintaining the three primary program areas and directing funds to specific projects with varying levels of specificity through a series of budget bills. On the one hand, this has created some accountability for the deployment of these resources and allowed bi-annual adaptation to changing needs. On the other hand, without codification or a fixed funding source, this arrangement is not especially strategic, and has created a resource drain on Commerce as the agency and supporters must advocate for and protect these programs each biennium.

In the coming years, the 100% clean electricity goal of the 2019 Clean Energy Transformation Act combined with the state's aggressive greenhouse gas reduction targets will cause fundamental change to Washington's energy landscape and transformation of an essential service, electricity. Electric utilities will need to transition their portfolios and their infrastructure. Industries will have to change their practices. Consumers and businesses will be required to adopt and adapt to new efficiencies in buildings and transportation. To reach our ambitious decarbonization outcomes, the state will need to embrace nature-based and other agriculture and forestry solutions to reduce emissions and sequester carbon. At the same time, communities are stepping forward asserting their desire to shape their own energy future and ensure an equitable distribution of the costs and benefits of the clean energy economy. In the long term, the CEF has a structure that can help support the innovation and infrastructure adaption that will be necessary to this transition. In the short term, CEF investments can provide a proven opportunity to put skilled workers and businesses to work. Determining the best use of these funds will best be done in a strategic fashion.

Moving forward, we can build on Washington's strengths, sector-by-sector. With its strategic goal of "developing, demonstrating and deploying clean energy technolog[ies] that save energy and reduce energy costs, reduce harmful air emissions, or otherwise increase energy independence for the state," the CEF can continue to be a tool to build on Washington's clean energy policies and sectoral strengths, and help the state rebuild our economy.