Clean Energy Fund

Impacts in Central Washington

CLEAN ENERGY FUND IN ACTION CEF INVESTS IN INNOVATIVE TECHNOLOGIES AND RD&D

The CEF supports **Beta Hatch's development of a novel** waste-heat recovery approach, using low-grade waste heat from a neighboring data center to heat the Beta Hatch insect farming operation. In the US, waste heat represents 5-13 quadrillion British thermal units per year of potential energy to be harvested. With the cheapest electricity in the country, Washington hosts millions of square feet of data centers, many concentrated in Chelan and Douglas counties. These facilities often have extremely high energy capacity and consumption rates (with an average of 9 MW/facility) but provide very few jobs. For this and other reasons, in 2018, Chelan County passed a moratorium on cryptocurrency mining and other high-density load applications. Co-locating Beta Hatch insect production with data centers would remove some of these energy-economy tradeoffs by creating jobs in conjunction with server facilities.

Beta Hatch

Mission Statement: Beta Hatch creates insect-rearing technology that converts mealworms and their waste into high-value proteins, oils, and nutrients for agriculture. Beta Hatch's IP enables insects to cost-effectively meet the global scale of demand for animal feed and crop fertilizer.

Location: Wenatchee, Washington

Legislative District of Project: 12 **Number of Employees:** About six employees

Funding: Beta Hatch has raised over \$4.8 million in grants and investments

Total Match to CEF funded project(s): \$937,800





Region: \$18,246,000

Private Funds Leveraged: \$41,549,000

Map dots are centered on the reported ZIP Code of the project and thus are not representative of the exact project location. Multiple projects within a single ZIP Code are represented by larger dots. Map does not include all Clean Energy Fund projects or the sites of consumer or commercial investments facilitated by grantees under the Energy Revolving Loan Fund program

Energy Northwest's Horn Rapids Solar, Storage & Training Project in Richland provides Washington state its first opportunity to integrate a large-scale solar and storage facility into its clean mix of hydro, nuclear and wind resources. This first-of-its-kind facility combines solar generation with battery storage and technician training. The site is just north of Richland, on land owned by the International Brotherhood of Electrical Workers. The project will be a 4-megawatt electric, 20-acre solar generating array of photovoltaic panels that will provide enough energy to power 600 Richland homes. The project will also include a 1-MW battery storage system; and serve as a training ground for solar and battery technicians throughout the nation. The combination of photovoltaic solar with battery storage will provide a predictable, renewable generating resource.

Energy Northwest

Mission Statement: Energy Northwest's provides its public power members and regional customers with safe, reliable, cost-effective, responsible power generation and energy solutions.

Location: Richland, Washington Legislative District of Project: 8

Number of Employees: Energy Northwest employs over 1,100 people

Customers Served: More than 1.5 million customers. Total Match to CEF funded project(s): \$7,053,262

ADDITIONAL PROJECT SPONSORS WITHIN THE REGION

OneEnergy Renewables

Mission Statement: OneEnergy Renewables is an innovative developer of community and utility-scale solar energy projects in North America. Powered by the belief that the future will run on clean energy, the team delivers solar projects to communities, utilities, and commercial and institutional customers. They build trust with landowners, communities, and customers to help them achieve a cleaner, brighter energy future.

Location: Based in Seattle but project took place near

Sunnyside, Washington

Legislative District of Project: 15 Number of Employees: 30 employees

Annual Revenue: Annual revenue of approximately

\$10 million

Total Match to CEF funded project(s): \$5,130,050

Pacific Northwest National Lab (PNNL)

Mission Statement: PNNL advances the frontiers of knowledge, taking on some of the world's greatest science and technology challenges. Distinctive strengths in chemistry, earth sciences, and data analytics are the heart of our science mission, laying a foundation for innovations that improve America's energy resiliency and enhance national security.

Location: Main campus is in Richland and includes two dozen facilities including a Marine Sciences Lab located in Sequim and a Bioproducts, Sciences, and Engineering Lab located on WSU's Tri-Cities campus.

Legislative District of Projects: 8

Number of Employees: 4,414 scientists, engineers,

and professional staff

Research Funding: Annual operating budget of \$960

million

Total Match to CEF funded project(s): \$4,190,134

TUUSO Energy

Mission Statement: TUUSSO Energy is a Seattle-based developer of utility-scale solar plants founded in 2008. TUUSSO focuses on developing mid-sized projects in close proximity to existing transmission infrastructure and targets previously disturbed sites where impacts to environmentally sensitive areas can be avoided.

Location: Based in Seattle but their project is in Ellensburg, Washington

Legislative District of Project: 13

Number of Employees: Seven employees

Annual Revenue: Less than \$1 million in estimated annual revenue

Total Match to CEF funded project(s): \$5,000,000