

Abstract***Holistic decarbonization, energy burden reduction, energy efficiency & health improvements
in multi-family affordable housing proposal
Seattle Office of Housing***

The end goal of this project is to provide comprehensive retrofits to 3-5 multi-family affordable housing properties serving low-income tenants for 50 or more years. The main focus will be on capital investments to convert heating, hot water, ventilation and appliances from gas to more efficient electric systems, along with other health and safety improvements to benefit tenants and traditional energy efficiency measures. Additionally, the goal is to reduce tenants' energy burden by ensuring that all tenants in the demonstration projects leverage the City of Seattle's Utility Discount Program (UDP) which provides a 60% discount on electric bills for customers earning 70% of state median income. Finally, the goal is to advance a more inclusive approach to evaluating cost-effectiveness by recommending how to include non-energy benefits and the social cost of carbon associated with these demonstration projects.

If funded, the activities proposed in this grant would allow DOE to gain experience and knowledge in supporting a holistic approach to energy efficiency, decarbonization and health and safety improvements in the multi-family affordable housing sector. DOE E&I funds will be leveraged with several other sources of funding including other state and federal weatherization dollars and conservation funds from Seattle City Light.

The Seattle Office of Housing (OH) will be the lead member of the team. OH has been the sub-grantee for federal weatherization funds, including DOE, for 30+ years and has extensive experience in the multi-family sector. Over the last 15 years, we have provided energy efficiency improvements to 280 multi-family properties, the vast majority of them affordable housing, with over 13,000 units. The project team also includes the Seattle Office of Sustainability and the Environment (OSE), Seattle City Light (SCL) and the Housing Development Consortium (HDC). Each entity brings deep expertise in its respective area and have a demonstrated history of working together to advance environmental justice, energy efficiency and decarbonization goals for low-income households.

At the end of the project 3-5 demonstration projects will have received decarbonization, health and safety and traditional weatherization improvements. 98% of tenants will be enrolled in the Utility Discount Program with a goal of a 10% reduction in energy costs, measured by a comparison of before and after energy use on utility bills. Greenhouse gas emissions from all buildings will have been reduced by a goal of 50%, measured by the reduction in greenhouse gas emissions, factoring in the carbon intensities of all fuels used in the project buildings both pre and post retrofit. Energy efficiency will have increased by a goal of 30% as measured by available information on pre and post installation utility bills. The goal will be 40% of households served will be BIPOC households as measured by demographic information properties report to OH annually.