

ENERGY Energy Efficiency & Renewable Energy



GEB Working Group Virtual Forum

"Connected Communities"

Building Technologies Office December 2, 2021

1 | Energy Efficiency and Renewable Energy eere.energy.gov

"These projects will help universalize technology that can maximize the efficiency and sustainability of America's nearly 130 million buildings and make significant headway in the fight against climate change."

- U.S. Secretary of Energy Jennifer M. Granholm

DOE Press Release | October 13, 2021



Groups of GEBs can provide added value: Connected Communities

Group of GEBs with diverse, flexible end use equipment that collectively work to maximize building and grid efficiency without compromising occupant needs and comfort.





Connected Community

Connected Communities Projects to Take Many Forms



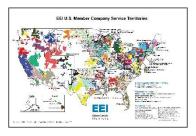
Residential neighborhoods



Geographicallydispersed building portfolio



Mixed-use development



Different geographies with varied utility and regulatory practices



Commercial and multi-family buildings



New construction and existing building retrofits



University, or corporate campus



DER integration: PV, battery storage, EV charging, CHP & district systems

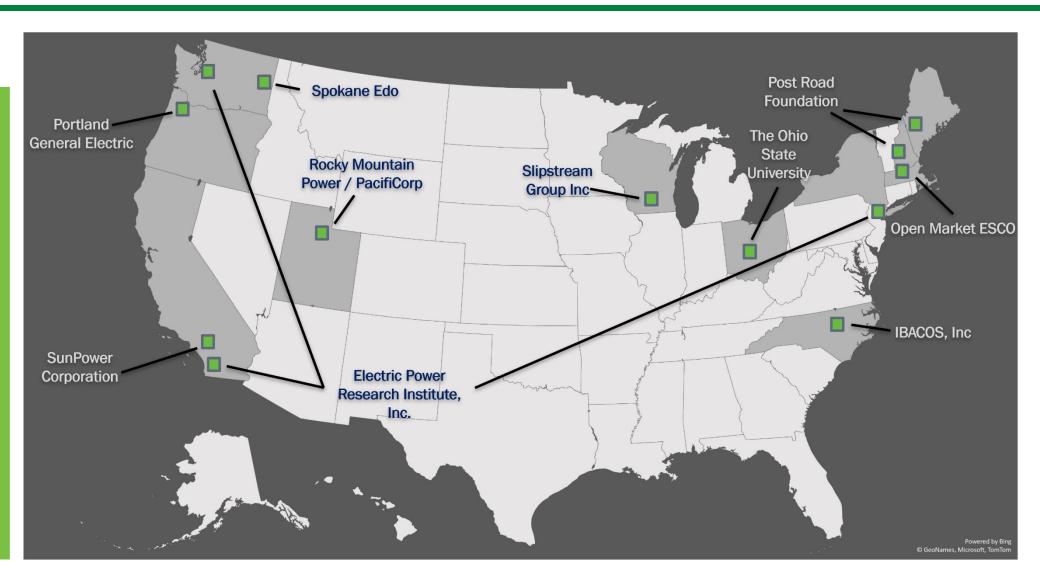


Location of Selected Connected Communities Projects



SUMMARY

- 10 Selected Projects
- \$61 Million BTO, SETO, and VTO cofunding
- Final Awards expected January 2022.





	Region				Building Type					DERS								
Applicant	Northeast	South	Midwest	Mountain	New	Existing	Single-family	Multi-family	Commercial	Industrial	PV	Battery Storage	EV Charging	CHP/District	Wind	EE	Buildings/Facility Mix Included	Addressing Equity
IBACOS, Inc.		Х			Х	Х	х				Χ	Χ	Х			ZERH- 30% new, 10-15% existing homes	500 new and 500 existing SF homes	
Spokane Edo				X		Х	Х	X	X		Х	Χ	X			440-900 MWh reduction	50-75 existing residential and 25-50 commercial	Location in majority of Spokane's designated Opportunity Zones
The Ohio State University			Х			Х		Χ	Χ		Х	X	X	Х	X	10% or 35% vs 2017 EPC	Campus project of 20 buildings, mix of comm and MFH	
Open Market ESCO	Х					X		Х	Х		Χ	Х	X			30% reduction - 4,700 MWh/year	Up to 2000 existing MFH units	LMI population. Some buildings in Qualified Opportunity Zones.
Portland General Electric				Х		Х	x	Х	Х		Х	X	X			10%	580 SF/MF existing homes & small comm buildings	Focus on reducing energy burden of low- income residents and exploring new ways to reach historically underserved populations
SunPower Corporation				Х	X		Х				Χ	Х	X			38% - 57% - ZERH	237 new SF homes	
Post Road Foundation	х					Х	x		Х	Х	Х	Х	Х			16%	350 existing SF homes, 50-65 small commercial, 5 industrial	Maine community likely in Madison, which is a Qualified Opportunity Zone
Slipstream Group			Х			Х			Х		Χ	Х	X			39%	15-16 comm buildings (mix of MUSH and private markets)	
Rocky Mountain Power / PacifiCorp				X	X	х		Х	Х		Х	X	X			(30% - 50%)	700 MFH units, comm buildings (retail, office, higher ed), industrial building, EV bus depot, and EV test track	Includes 5 affordable multi-family buildings
Electric Power Research Institute	х			Х		Х		Х			Х	х	Х			30%	2000 units of existing MFH	Includes affordable housing communities