Albany County Scalable Community Aggregation for Lower cost of Energy (AC-SCALE)

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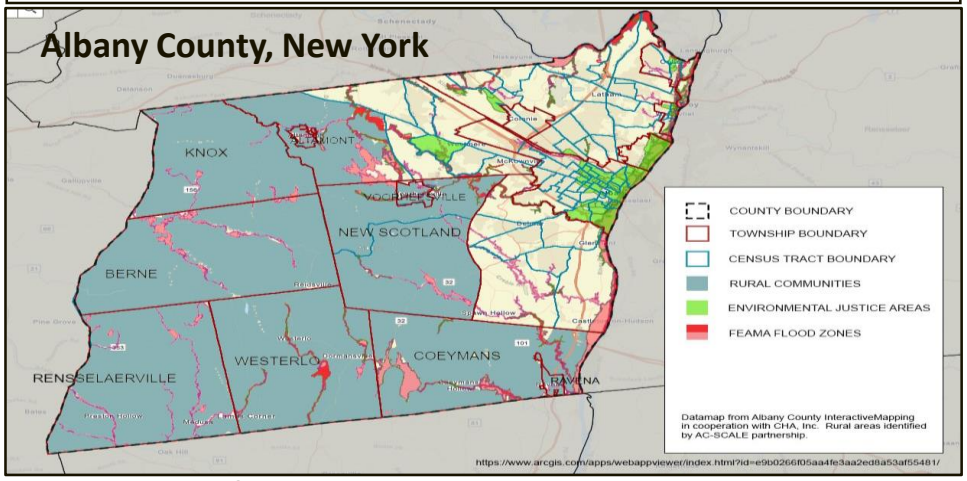
3045-2110

Technology Summary

The AC-SCALE project will harness the potential for energy-efficiency and clean energy technologies to transform residential buildings into grid-interactive, efficient buildings for energy savings and grid services in equitable manner, unlocking more tangible benefits for rural and vulnerable communities for lowering energy costs, improving energy access and resilience, and/or reducing environmental harm. The AC-SCALE will develop and demonstrate a systematic program that simplifies and standardizes every step from enrollment to deployment to operation and maintenance, with a suite combination of cost-effective energy efficiency and electrification technologies. Through community engagement and trust building, the AC-SCALE empowers the rural and vulnerable communities to make informed decision on retrofits and to mitigate or overcomes financial barriers (upfront and operation/maintenance costs), ensuring energy resiliency and energy democracy for a just energy and environmental future.



Key Project Takeaway

100 homes within rural and vulnerable communities of Albany County, NY will be retrofitted with cost-effective, innovative decarbonization technologies, lowering energy costs, improving clean energy access and resilience, and/or reducing environmental harm

Key Participants

Albany County: Lucas Rogers, ecoLong: Nancy Min, Albany Cornell Cooperative Extension: Nancy Lerner, Affordable Housing Partnership: Susan Cotner, Albany County Land Bank: Adam Zaranko, National Grid, Albany County Rural Housing Alliance, Community Loan Fund, and others.

Total Project Cost

Total Project Cost: $ 4,900,000 Requested DOE Funds: $ 4,900,000

Project Goals

Community engagement and trust building – To better understand energy burdens and climate vulnerabilities in rural and disadvantaged communities, increasing positive energy equitable outcomes with decarbonization remedies

Cost-effective decarbonization pathways – To develop and demonstrate a systematic program with cost-effective energy efficiency and clean energy solutions (a combination of PV, BESS, HVAC, and HPWH), lowering upfront costs, improving cost-to-value ratio, and being easy-to-use and adoptable at scale in rural and vulnerable communities

Topline community benefits

The AC-SCALE will transform the rural and vulnerable community from the status as a lagging and economically deprived community to one that is on the forefront of innovation and decarbonization technology, and to spur a deep and long period of economic prosperity and growth for decades to come.

The AC-SCALE is to create significant community benefit, including:

1) Continued reduction in energy burden;
2) Decrease in environmental exposure and burdens;
3) Increase in energy democracy and energy independency;
4) Increase resiliency and reliability during extreme weather events;
5) Increase parity in clean energy technology access and adoption;
6) Increase clean energy jobs, job pipeline, and job training