# ROC Community Clean Energy Coalition

# Coalition

 Revitalize Our Communities (ROC) Inc. is a nonprofit organization that seeks to make our communities more beautiful and beneficial through Science Technology Engineering Arts and Mathematics (STEAM) partnered with Westlake High School in Fulton, GA and supported by Georgia State University and University of Florida

#### Goals in relation to Justice40 Priorities

- Increase South Fulton, GA community awareness about solar energy and sustainable agriculture
- Provide fresh vegetables and fruit in the South Fulton low access food areas through the integration of solar energy, hydroponics, and artificial intelligence (AI)
- Build the training pipeline of certified photovoltaic (PV) solar installers in the South Fulton community

### Activities

- Implement Saturday, summer, and after school programs where STEM underrepresented high school youth apply STEAM with artificial intelligence to operate and automate an 8 ft x 24 ft solar powered hydroponic greenhouse on wheels
- Transport the greenhouse to elementary and middle schools, and community events to execute a set of sustainability workshops related to solar energy, energy conservation, and clean energy job awareness
- Develop website and youtube channel with online videos with computational music to further expand awareness both within and outside the South Fulton community promoted through social media
- Prepare and support high school youth underrepresented in STEM to pass the NABCEP associate level PV solar installer certification exam

## Metrics

- Operation and AI automation of the solar powered greenhouse and add 2-D tracker ground-based solar power through the 2023-2024 school year to grow at least 500 lbs. of vegetables and fruit
- Prototype middle and elementary school clean energy workshops with 100 students in September 2023, and expand the workshops to over 1000 students per year in the 2023-2024 school year
- Add another K-12 school partner by September 2023 and have at least ten high school youth, who are underrepresented in STEM, pass NABCEP associate level PV solar installer exam by September 2024

