

Resiliency Hub Charging Depot for the Underserved Community of Bronx, NY

Team Name: IEMS Solution

Members:

- Kaveh Aflaki (PhD in EE, MBA, PE, 20 Years in the Energy Industry)
- Ashkan R. Kian (PhD in EE, PE, 25 Years in the Energy Industry)
- Elnaz Nazemi (Business Management, Community Engagement Professional)

Underserved community of Bronx faces a myriad of energy challenges that hinder their quality of life and economic opportunities. High energy costs, outdated infrastructure, and limited access to clean and reliable energy sources are some of the primary concerns. The community is disproportionately affected by environmental pollution and health risks associated with outdated energy systems, leading to respiratory illnesses and reduced overall well-being. Furthermore, during extreme weather events, such as storms or heatwaves, the lack of resilient energy infrastructure leaves residents vulnerable to prolonged power outages and disruptions in essential services. Addressing these challenges requires comprehensive solutions that prioritize equity, sustainability, and community engagement to ensure that all residents have access to affordable, reliable, and clean energy solutions. As part of this disadvantaged community, IEMS Solution chose to aid GVC, Ltd. of Bronx, New York, to electrify their electric school bus fleets. The fleet operator specializes in transporting disabled or disadvantaged children to schools across New York. In addition to environmentally supporting the community, these electric buses will make the community more resilient, being one of the first Electric School Bus Vehicle-to Grid (V2G) deployments nationwide. The proposed solution for this energy challenge, building a Resiliency Hub Microgrid Charging Depot in this community with full support from GVC, Con Edison, and other partners, will be one of the first nationwide deployments.

Partners : GVC Ltd School Bus, Honeywell, Con Edison, The Advanced Energy Center (AERTC) of Stony Brook University, Farmingdale University, The New York Energy Democracy Alliance (EDA) and WeAct as an active NGOs.

