

Southcrest Cooperative Energy Feasibility Initiative

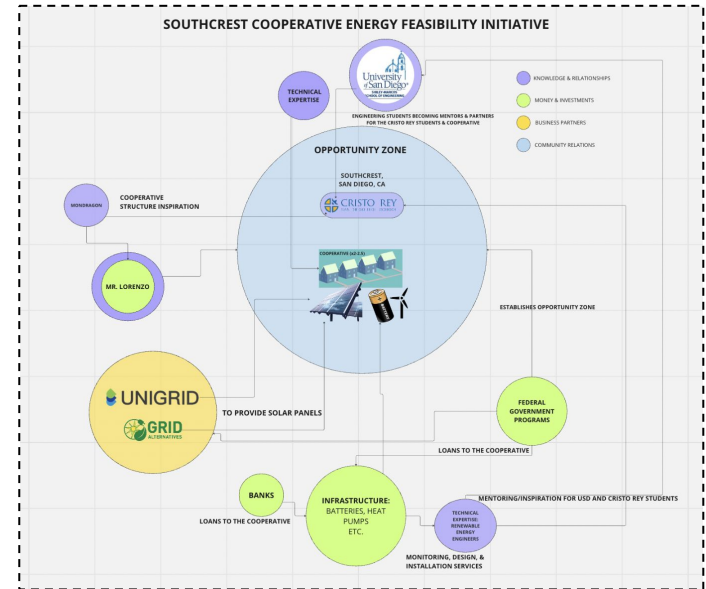
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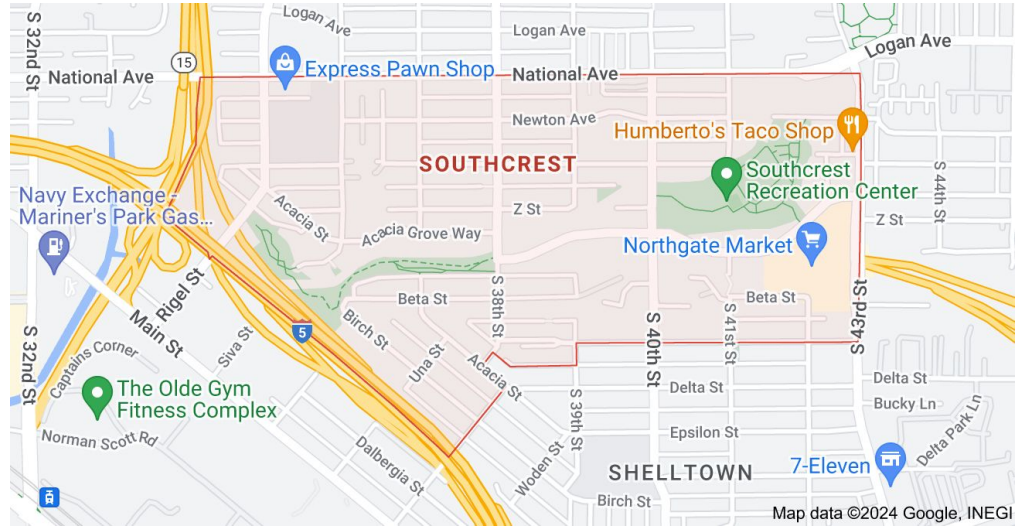
Project Abstract:

This research project provides an overview and feasibility analysis of a community-based project emerging in the Opportunity Zone of Southcrest, San Diego, California. Virgil Lorenzo (EdD), CEO of GLOBE Education Consultants, proposes a project inspired by the Mondragon Cooperative Corporation, aiming to introduce renewable energy to Southcrest. Lorenzo seeks Distributed Energy Resources (DER) Project Teams to kickstart the initiative, which involves outfitting homes with renewable energy sources like solar panels and micro wind turbines. Eventually, these homes will form a microgrid, potentially selling excess energy back to the main grid during peak usage. The project adopts a community-first approach, engaging Cristo Rey High School students and their families, while Shiley-Marcos School of Engineering students provide mentoring. To enhance sustainability and community involvement, we advocate restructuring the project to prioritize community input in decision-making processes.

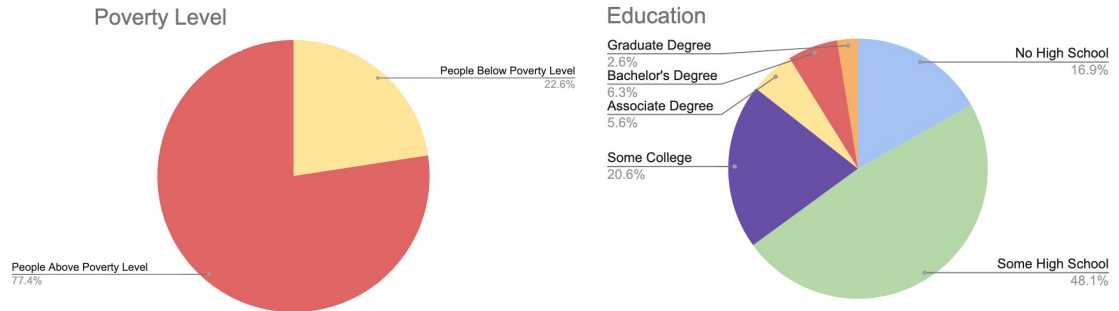


Southcrest Community

- Located in the southeastern region of San Diego city
- Due to overall low income levels of families in the community, it is designated an “Opportunity Zone.”
- Designation provides federal tax breaks to investors to encourage economic development
- Designation can also incentivize gentrification



POPULATION: 51.5 K

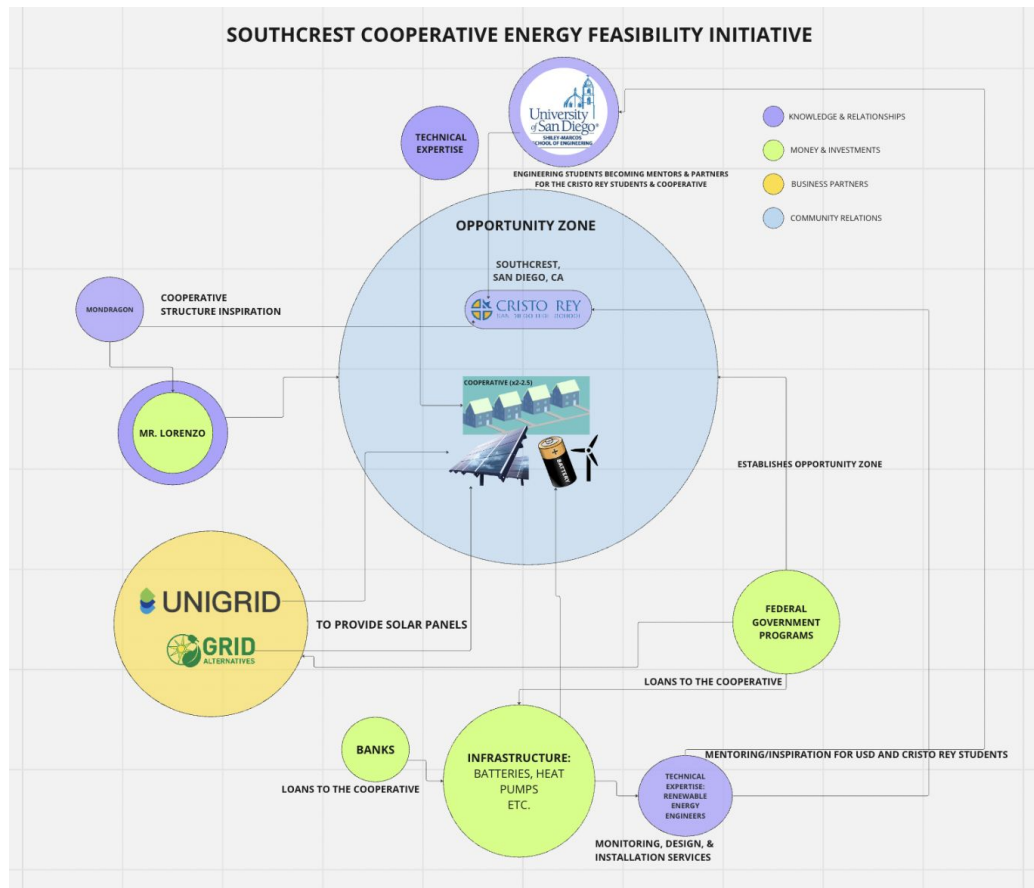


United States Census Bureau. (2000). Southcrest Demographic Profile

Community-Centered Investment Solution

Establish a home-owner cooperative

- Inspired by the Mondragon worker cooperative principles
- Comprised of 8 -10 homes
- Homes connected on a microgrid, powered by renewable energy sources, i.e., solar panels and micro wind turbines
- Renewable energy systems installed and shared across homes



Establish a home-owner cooperative

- Leverage programs developed for Opportunity Zones, along with bank financing to support the attainment of free or reduced pricing on solar panels and other renewable energy infrastructure
- **Energy Goals:**
 - Sell more affordable (than SDG&E), reliable and green energy to families in the co-op
 - Store excess energy during low demand periods and sell to main grid at peak periods
 - Profits used to support community development(10%), cooperative development (60%) and distributions to co-op members (30%)
- **Education Goals**
 - Support education of local students through internships. Support the education of wider community on energy.

Community Engagement and Considerations for Socially Just and Sustainable Development

- Establish clear leadership within the community by identifying individuals who hold significant social capital and trust among community members.
- Disseminate detailed project information widely throughout the community using various communication tools to ensure accessibility. Encourage active participation and feedback from all stakeholders to foster transparency and inclusivity.
- Recognize and utilize existing community institutions, organizations, expertise and partnerships. Identify potential collaborators and stakeholders within and outside the community.
- Motivate community members towards a shared vision for the project and clearly articulate achievable goals and outcomes that align with community aspirations and values.
- Continuously assess community desires, challenges, and priorities. Prioritize needs based on community input and ensure inclusivity in decision-making processes.
- Foster a collaborative environment where diverse perspectives are valued and respected. Ensure alignment on project priorities and objectives among stakeholders to enhance project effectiveness and sustainability.

Insights from Feasibility Assessment

Eligibility Challenge:

Solve eligibility issues, especially regarding homeownership, to include more of the community, particularly lower-income families. At present 70% of residents don't own their own homes in Southcrest and won't be eligible to be members of the cooperation

Community Engagement Priority:

Boost community involvement by leveraging trusted leaders to ensure project support and success.

Feasibility and Impact:

Despite complexities, the project offers significant potential to bring renewable energy to underserved areas, needing structural changes for success.

Call to Action:

Address logistical challenges and refine goals to provide sustainable energy solutions for communities like Southcrest.