

GRID Alternatives & The City of Riverside: Financing an Equitable Clean Energy Market in the Inland Empire

Building a Clean Energy Investment Pipeline in Riverside, California

AT A GLANCE

Investment Priorities

Affordable Housing Solar, Municipal Solar-plus-Storage, Zero-Emission Transportation & EV Charging, Clean Energy Workforce Development

Pipeline Value

\$11.2M across 27 projects (avg. \$414K each; several still pending final sizing)

Key Partners

GRID Alternatives Inland Empire, City of Riverside, Riverside Public Utilities (RPU), USGBC California, Riverside County

Community Impacts

- Project-level GHG and savings to be modeled through feasibility studies (NREL PVWatts + CARB GHG calculator)
- Plan targets: 500+ workforce trainees/year (GRID Clean Tech Training Center)
- Up to \$35M in projects mobilized in year one via the Energy Resilience Fund.

Strategic Role

Project Originator / Market Builder / Co-Investor

The Path Forward

GRID Alternatives, the City of Riverside, and USGBC California will secure predevelopment funding (via feasibility studies, energy audits, design and engineering, and permitting support) and capitalize GRID's Energy Resilience Fund to move an early-stage, LIDAC-first pipeline toward investment readiness.

THE BIG PICTURE

Riverside already looks like a clean energy leader. The City has run the greenest municipal fleet in North America since 2022, completed a Zero-Emissions Vehicles Fleet Transition Plan, and ranks 11th in the nation per capita for solar adoption. But strong rooftop numbers mask a harder problem: in Riverside's low-income and disadvantaged communities (LIDACs), clean energy projects routinely stall before they ever reach an investor, blocked by early-stage financing gaps and high customer-acquisition costs.

The Challenge: Despite high solar adoption citywide, clean energy projects in Riverside's LIDACs stall before reaching investment readiness — early-stage capital is scarce, customer-acquisition costs are high, and permitting and interconnection processes add friction and delay.

The Solution: A whole-community public-private partnership that combines GRID's project origination and its Energy Resilience Fund (a revolving bridge-loan facility), the City and RPU's policy levers (streamlined permitting, a raised self-generation cap, and rebate programs), and USGBC California's market convening and workforce pipeline — together de-risking projects enough to attract institutional capital.

Through the Municipal Investment Fund (MIF), GRID Alternatives — the nation's largest solar nonprofit — is partnering with the City of Riverside and USGBC California to close that gap. The coalition follows a deliberate “whole community” approach, pairing nonprofit project-development muscle with municipal leadership and a market-convening hub. The goal is not a single installation, but a functioning marketplace: a pipeline of distributed generation, storage, and zero-emission transportation projects that private capital can finance, with LIDAC residents centered throughout.

GRID brings a national track record to the effort. Since 2004 it has installed more than 24,000 clean energy projects, saved families over \$800 million in lifetime electricity costs, prevented more than 2.3 million tons of greenhouse gas emissions, and given over 34,000 people hands-on solar installation experience. In Riverside, that experience is focused on a local market-building strategy grounded in the City's own Real Estate Market Assessment for Retrofit Investment.



"The Riverside community is excited for more local climate investment that results in lower energy bills, healthier air, and resilience to extreme heat and power shutoffs. They enthusiastically support a municipal investment fund to help lower upfront costs for these projects."

— Michael Rochmes, Policy & Advocacy Manager, USGBC California

LAYING THE FOUNDATION

Before capital can flow, Riverside is building the market infrastructure that turns LIDAC concepts into financeable projects — aligning a coalition, standing up a revolving fund, and using a live policy window to lower costs across the whole pipeline.

Coalition and Partnership

The coalition pairs three complementary strengths. GRID Alternatives leads project identification, development, financing, and installation with a community-centric model. The City of Riverside — home to 318,858 residents and the largest city in the Inland Empire — contributes eligible sites from its Capital Improvement Plan (2024–2029), EV Fleet Transition Plan, and RPU's renewable development plans, plus the policy authority of a municipal utility. USGBC California, with 3,000+ members, convenes the regional market through its Building Performance Hub and supplies workforce programming.

Building the Enabling Environment

Working with Riverside Public Utilities, the coalition is advancing concrete demand- and supply-side interventions:

- A streamlined solar permitting process targeting same-day online permits and interconnection for 70–80% of rooftop solar projects.
- A raised self-generation cap, from 1 MW to 5 MW onsite (export limited to 1 MW), to expand cost-saving opportunities.
- RPU's forthcoming Energy Plan (consultant report due mid-2026, to be made public), forecasting electrification impacts on the distribution grid and signaling commitments on grid resilience and capacity planning.
- Energy-efficiency incentives including heat-pump rebates and battery storage rebate pending City Council approval.

Green Financial Products

The financing strategy is built to make LIDAC projects bankable without upfront cost to residents. It leverages federal solar (IRC §48E) and storage (IRC §25D) tax incentives alongside PPA leases and GRID-owned systems, and explores consumer-facing financing mechanisms, including On-Bill Financing (OBF) and Tariff-Based Recovery (TBR), as potential future pathways for reducing upfront cost barriers — that tie repayment to utility bills. Anchoring the strategy is GRID's Energy Resilience Fund (ERF): a pooled revolving loan fund with a 3–5+ year term and a target rate of 0–3%, used to bridge committed incentives (including direct-pay ITC revenue and safe-harbored solar PV) through development and early construction, when investor risk is highest.

Workforce & Community Engagement

GRID's Clean Tech Training Center (CTTC) is being expanded to build a local clean energy workforce pipeline targeting 500+ trainees annually through GRID's Clean Tech Training Center, with pathways into apprenticeship programs, clean energy contractors, and local employers, with priority for minority- and women-owned business enterprises (MWBs) and underrepresented workers; USGBC California's Green Janitor Education and GPRO programs add complementary green-building credentials. Engagement to date has run through the Building Performance Hub, two stakeholder workshops, and direct outreach. Stakeholder engagement sessions attracted representatives from affordable housing, finance, labor, municipal government, community organizations, and private industry. Survey results showed that 100% of respondents expressed strong interest in a municipal investment fund, while approximately half indicated they would pursue building improvements within 18 months if financing were available.

ORIGINATING A LIDAC-FIRST PROJECT PIPELINE

Riverside's pipeline is an early-stage portfolio: dozens of city-owned, affordable-housing, and community sites identified as candidates, with transaction sizing and technical specifications to be confirmed through predevelopment work. The projects cluster into four representative groups, each centered on benefiting critically impacted communities. Final scope and cost estimates would be confirmed through engineering feasibility studies.

Priority is given to projects that lower utility costs, improve resilience during outages and extreme heat events, preserve affordable housing, and create workforce opportunities for residents of disadvantaged communities.

Affordable Housing Solar Portfolio (LIHTC) | ~\$6.6M

Twelve Low-Income Housing Tax Credit properties across Riverside, advanced in partnership with Riverside County, targeted for net-zero-oriented solar and storage upgrades that lower energy costs for residents at no upfront cost.

- **Capital Stack:** Federal solar ITC (\$48E) and storage incentives (\$25D); PPA leases / GRID-owned systems; On-Bill Financing and Tariff-Based Recovery for residents; ERF bridge financing through development.
- **Revenue Streams:** Resident energy cost savings; power purchase agreements; renewable energy credits.
- **Investment Readiness:** Early-Stage Pipeline — site assessments, energy audits, and financial feasibility are the immediate predevelopment steps.

Municipal Facilities Solar-plus-Storage Portfolio | ~\$4.6M

City-owned buildings and critical infrastructure slated for solar-plus-storage and battery upgrades — including the Convention Center, City Hall, the Utility Operations Center, the Emergency Operations Center, Janet Goeske Center, Shamel Park, Hunt Park, and water/sewer facilities such as the Spring Mountain Wastewater Pump Station and Wood Street Sewer Lift Station.

- **Capital Stack:** Federal solar ITC (\$48E) and storage incentives (\$25D); PPA leases / GRID-owned systems; ERF bridge financing.
- **Revenue Streams:** Municipal energy cost savings; renewable energy credits.
- **Investment Readiness:** Early-Stage Pipeline — engineering feasibility studies required to confirm sizing and capital stacks.



Zero-Emission Transportation & EV Charging | sizing in progress

Solar, storage, and EV-charging deployments tied to the City's fleet electrification — including the Municipal Airport and Corporation Yard (each pairing solar and storage with charging), the broader City Fleet Transition, and citywide EV Charging Infrastructure.

- **Capital Stack:** Federal solar ITC (\$48E) and storage incentives (\$25D); PPA / GRID-owned systems; ERF bridge financing; transaction sizing to be confirmed in predevelopment.
- **Revenue Streams:** Energy cost savings; EV charging user fees; renewable energy credits.
- **Investment Readiness:** Early-Stage Pipeline — feasibility and load analysis required to define scope and cost.

Community & Service-Provider Sites | sizing in progress

Privately held community-serving sites engaged as early pipeline candidates, including Adams Motorsports Park and the Mt. Rubidoux SDA Church, paired with solar, storage, and zero-emission transportation elements.

- **Capital Stack:** Federal incentives (\$48E / \$25D); PPA / GRID-owned systems; ERF bridge financing; sizing to be confirmed.
- **Revenue Streams:** Energy cost savings; renewable energy credits.
- **Investment Readiness:** Early-Stage Pipeline — scoping and feasibility are the next steps.

While many projects remain in the predevelopment phase, the coalition has prioritized assets with committed ownership participation, identifiable energy-saving opportunities, and alignment with municipal and affordable housing investment priorities.



IMPACT & NEXT STEPS

Riverside's strategy is designed to convert clean energy leadership into bankable, equity-centered projects — and to make the path repeatable. The monitoring framework tracks each project in Salesforce from first contact through interconnection, modeling generation with NREL's PVWatts calculator and emissions reductions with the California Air Resources Board's GHG calculator.

The Strategic Gap: The pipeline is early stage. Without site and building assessments, feasibility studies, design and engineering, and permitting support, LIDAC projects cannot reach the investment readiness that institutional capital requires.

The Last Mile: The Energy Resilience Fund is the bridge. By capitalizing a revolving loan fund, GRID projects that a \$10M investment can unlock up to \$35M in projects in the first year, revolving at least once to roughly \$75M over a full loan term.

The Multiplier Effect: Predevelopment dollars and ERF bridge financing pull through federal ITC (\$48E / \$25D) and state incentives, while the revolving structure recycles capital across successive projects.

Urgency: A live policy window is open: RPU's mid-2026 Energy Plan, the raised self-generation cap, the streamlined-permitting commitment, and a pending battery rebate together create a time-limited convergence the pipeline is positioned to capture.

A Replicable Model: The whole-community partnership structure, the revolving Energy Resilience Fund, and the Real Estate Market Assessment that anchors project prioritization are designed to travel — offering other cities a repeatable template for blending public and private capital in disadvantaged communities.

This case study was funded through the Municipal Investment Fund (MIF) to support local governments and their partner not-for-profit organizations in developing public-private partnership plans that accelerate the deployment of capital to energy and infrastructure projects.