

Groundswell Capital: Tucson's Blueprint for Investable Clean Energy and Clean Water Infrastructure

Building a Clean Energy Investment Pipeline in the City of Tucson, Arizona

AT A GLANCE

Investment Priorities

Net-Zero Emissions Buildings and Distributed Energy Generation & Storage, also advancing Zero Emissions Transportation, Water, and Resilience Infrastructure

Pipeline Value

\$72 million across 25 projects

Key Partners

Groundswell Capital (Arizona's Green Bank); City of Tucson Housing & Community Development and Planning & Development Services; Tucson Industrial Development Authority (Tucson IDA); Arizona Office of Economic Opportunity; Vantage West Credit Union; NAD Bank; Tucson Electric Power (TEP); Chamber of Southern Arizona; Pascua Yaqui Tribe; Pima Community College; Technicians for Sustainability; Sonoran Eco Solutions

Community Impacts

The plan prioritizes critically impacted communities. The pipeline will result in local jobs in construction, solar installation, and clean energy trades, with "earn-and-learn" pre-apprenticeship programs specifically targeting urban youth and tribal youth. Projects like community solar installations and energy efficiency upgrades are designed to reduce utility bills for residents who are most burdened by high energy costs.

Strategic Role

Market Builder | Project Originator | Finance Product Provider | Permitting platform enabler through AI powered pre-vetting mechanism

The Path Forward

Deploying the pre-development bridge loan program to its first cohort of 5-8 projects, operationalizing the Green Lane navigator, and closing the \$30 million Pooled Bond Fund to unlock institutional capital at scale.

THE BIG PICTURE

The Challenge: Tucson has the ingredients for a clean energy boom. Desert sun, a growing development community, strong university anchors, and a city government willing to move. But for years, sustainable projects stalled at the same predictable points — swallowed by soft costs, tangled in fragmented permitting, turned away by investors unfamiliar with the returns that clean energy projects actually deliver, or targeted by predatory financing practices in the neighborhoods that need relief most.

The Solution: Groundswell Capital, operating as Arizona's Green Bank, partnered with the City of Tucson on a "dual-engine" model. Groundswell is the financial engine — designing products that reduce cost and risk at every stage of development. The Tucson Industrial Development Authority is the procedural engine — a "green lane" navigator that streamlines regulatory approvals and eliminates the friction that kills projects before they start. The MIF grant funded the design of both engines and seeded the pipeline to run through them.



Sustainable Development & Economic Feasibility Working Session

Facilitator: Lexy Wellot, The Planning Center

Format: In-person working session

Attendees: Regional developers, investors, and architects

Location: Tucson Small Business Center

Purpose: To surface real-world constraints, data points, and practitioner insight related to integrating sustainability and net-zero concepts into development projects in Southern Arizona, with a focus on feasibility, market behavior, and potential financial solutions.

CREATING THE FOUNDATION: GREEN LANE, FINANCIAL PRODUCTS, AND COMMUNITY AS THE FOUNDATION

The Green Lane. The Tucson IDA, working with the City's Planning & Development Services Department, developed a "green lane" function that consolidates zoning, engineering, fire, and sustainability requirements into pre-development checklists for net-zero readiness projects. It coordinates a curated network of consultant teams, augments City staff capacity, and builds on existing reforms already in place — including same-day Express Lane permitting for residential solar via SolarAPP+ (operational since 2020), the Tucson Development Center Online Navigator, an Affordable Housing Fast Track with dedicated staff, and the Community Corridors Tool for redeveloping underutilized parcels. It is also piloting incorporating AI into a pre-vetting permitting service for developers before city permitting. It anticipates adding a second AI module to improve access to finance. For developers, the green lane means one entry point, one roadmap, and a market signal that Tucson is open for clean energy business.

Financial Product Design To lower the cost and risk of capital at every stage of development, Groundswell designed four interlocking instruments: i) a **Soft Costs Bridge Loan Program** (\$25K–\$500K, 12–24 months) provides patient capital for pre-development milestones — permits, financial models, corporate structures, revenue contracts; ii) a **Credit Enhancement and Loan Loss Guarantee Program** shares risk with conventional lenders, with each guarantee dollar mobilizing 3x–7x in private lending from partners like Vantage West Credit Union; iii) a **Construction Loan Program** positions Groundswell as a direct co-lender during the build phase, with a pathway to solo origination after 3–5 successful deals, compressing timelines and reducing transaction costs as the portfolio scales; and finally iv) the **Deployment of Digital and Conduit Bonds** aggregates projects to access institutional capital efficiently — with a \$30 million Pooled Bond Fund leveraging funds in collaboration with the Pasqua Yaki Tribe. The bond is already drawing preliminary commitments from the University of Arizona and NAD Bank, and has the potential to unlock up to \$300 million in deployable capital through municipal bonds. Groundswell is also exploring digital bonds to reduce issuance costs by 35–65%.

Coalition and Stakeholder Engagement The 25-project pipeline was built through direct developer engagement, coordination with City departments, and relationships with on-the-ground installers including Technicians for Sustainability and Sonoran Eco Solutions. The Center for Community Investment's Capital Absorption Framework disseminated through the MIF program played a big role in unlocking a stakeholder driven approach for identifying project needs. The Planning Center documented structural barriers and facilitated a stakeholder roundtable that shaped project selection — ensuring the pipeline reflects real market demand.

FEEDING THE PIPELINE: A DIVERSE PORTFOLIO

The 25 projects identified span high capacity community solar, energy efficiency retrofits for low-income rentals, EV infrastructure, water reclamation plant, and a resilience hub microgrid such as those highlighted below.

Tucson House — Affordable Senior Housing Rehabilitation | \$3 Million Bond-financed rehabilitation of 358 units of affordable senior housing.

Guero Canelo Solar Installation | \$2 Million An 800 kW solar array generating an estimated 1.4 million kWh annually, requires expedited TEP commercial interconnect and tariff optimization.

Flying Leap Farms Solar Project | \$400,000 120-180kW Installation of a solar energy system at a rural winery and production facility to offset energy use associated with agricultural production, processing, and operations, and supports long-term business sustainability in a rural community. 200 metric tons CO₂e of emissions reduced annually.

Wildcat Hill Waste Water Reclamation Plan | \$10 Million combined total for Solar drying, Biochar and Blower Replacement.

Gila River Indian Community — Lone Butte Solar Project | \$3 Million Solar installation serving the Gila River Indian Community Utility Authority.

Town of Sahuarita EV Charging Stations | \$1 Million Groundswell Capital is also a participant in a national level EV charging installation program for the state of Arizona.

The pipeline also includes state level fleet electrification, and a resilience hub microgrid — spanning the full range of Tucson's clean energy investment priorities.



"The Municipal Investment Fund is more than a financing mechanism—it's a new way of thinking about how cities prepare for the future. By aligning policy, capital, and community priorities, we're ensuring that Tucson isn't just resilient, but truly investment-ready."

— Dre Thompson, President, Groundswell Capital

IMPACT & NEXT STEPS

Tucson has multiple project engines running. The green lane is operational. The financial products are designed and ready for deployment. The coalition spans city government, a green bank, tribal partners, utilities, universities, and on-the-ground installers. And a 25-project, \$72 million pipeline is staged and waiting for capital to move.

Financial Products Ready to Deploy The bridge loan program targets 5–8 initial recipients in its first year — a 50/30/20 mix of private, nonprofit, and public developers. Projects that complete pre-development through bridge loans convert directly into the construction loan program, eliminating the financing gap that has historically broken deals at the worst possible moment. Each successful deal builds Groundswell's track record toward solo origination, compressing timelines and transaction costs across the full portfolio as it scales.

Workforce Pipeline The coalition connected its project pipeline with Pima Community College's Center of Excellence in Applied Technology, which runs clean energy trades training for underserved populations. The Resilient Southwest Building Code Collaborative is separately developing a workforce curriculum targeting urban youth, tribal youth, and others underrepresented in the trades — ensuring the jobs this pipeline creates go to the communities it serves.

The Strategic Opportunity With clean energy now embedded in the Chamber of Southern Arizona's 2026 priorities, the green lane operational, and the bond fund taking shape, Tucson is sending an unambiguous signal to developers and investors: the market infrastructure is here, the pipeline is real, and the path from concept to construction is shorter than it has ever been. For capital partners looking for a prepared, investable market in the Southwest, Tucson is ready.

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.

