

City of Newark, DE: A Municipal Utility's One-Stop Shop Approach for Clean Energy Developers

Building a Clean Energy Investment Pipeline in Newark, Delaware

AT A GLANCE

Investment Priorities

Distributed Solar & Battery Storage, Community Solar, Municipal & Institutional Energy Performance, Utility-Scale Storage

Pipeline Value

\$101M across 43 projects and portfolios

Key Partners

City of Newark Electric Utility, Energize Delaware, University of Delaware, Delaware Municipal Electric Corporation (DEMEC), Efficiency Smart, Conservation Advisory Commission, Delaware Solar Energy Coalition, Department of Natural Resources and Environmental Control (DNREC)

Community Impacts

5–10 MW projected new solar capacity; 7,000–14,000 MWh annually; estimated 2,135–4,270 MT CO₂e annual reduction (projected per PVWatts and DEMEC emissions factors)

Strategic Role

Market Enabler / Co-Investor / Project Originator

The Path Forward

Completing the co-located solar and battery storage feasibility study by April 2026, selecting an Energy Service Company (ESCO) to conduct an Investment Grade Audit for the next municipal ESPC, and launching a community solar program informed by demonstrated community demand.

THE BIG PICTURE

Newark, Delaware, is a city of 33,000 that operates its own full-service municipal electric utility. As both the municipality and the local distribution system operator, Newark manages permitting, interconnection, and rate design internally, compressing project timelines that investor-owned utility processes stretch by months. With support from the Municipal Investment Fund (MIF), Newark is converting its structural advantage into an active, community-subscribed pipeline of distributed solar, battery storage, and community solar projects, making Newark a one-stop counterparty for private solar and storage developers. As of 2025, approximately 38.5% of Newark's electricity supply comes from renewable resources. The City has committed to becoming 65% renewable by 2035 and 100% by 2045.

The Challenge: Without large open spaces for utility-scale generation, Newark is limited to small-scale renewable energy project sites requiring an active origination strategy to aggregate the fragmented opportunities into a financeable portfolio.

The Innovation: Operating as the local distribution utility, Newark can conduct in-house hosting capacity studies, streamline interconnection review, and design rate structures like time-of-use pricing and Renewable Energy Credit (REC) acquisition policies that directly improve distributed project economics.



CREATING THE FOUNDATION: UTILITY LEADERSHIP AND MARKET INFRASTRUCTURE

Newark used its MIF grant to build the technical, market, and community infrastructure required to deploy distributed solar at scale, closing the gaps in data, standards, and market demand that had previously limited project advancement.

- **Solar and Battery Storage Feasibility Study:** Newark commissioned ICF Consulting to conduct a co-located solar PV and battery energy storage system (BESS) feasibility study, due April 2026. The study is producing updated interconnection standards compatible with BESS, benchmarked incentive program comparisons from peer utilities, and techno-economic modeling of various distributed energy resource (DER) penetration scenarios using Newark's own utility data. The results will directly enable rate design, rebate structures, and program economics that make distributed projects financeable for private developers.
- **Community Demand Activation:** On March 5, 2026, Newark hosted two "Solarize Your Newark" events, drawing nearly 200 residents and local business owners. Attendees confirmed strong interest in community solar and shared-ownership models, with many expressing willingness to pay for the increased benefit. The City distributed electric bill rebates to in-person attendees and published presentation recordings for public use. These events produced a direct pipeline of interested subscribers, businesses, and landlords for follow-up project development.
- **Policy and Rate Framework:** Newark is establishing a REC acquisition policy under which the municipal utility purchases locally generated RECs, creating a stable additional revenue stream, improving project economics, and signaling consistent private investment demand. The BESS feasibility study is simultaneously developing time-of-use (TOU) rate designs and demand response frameworks. Together, these policies create the price signals developers and lenders need to underwrite distributed projects with confidence. Newark is also exploring PJM's FERC Order 2222 implementation, which would allow aggregated customer-sited DERs to participate in regional capacity and ancillary services markets as a virtual power plant.



Left to right: Steven Hegedus, Lucas Beidler, Dale Davis, and Drew Slater presenting at a community engagement event, "Solarize your Newark," to inform the community (residents, property owners, building owners, small businesses, etc.) on how solar works and the incentives available for solar in Newark

FEEDING THE PIPELINE: FOUR ORIGATION PATHWAYS

Newark's origination strategy runs four distinct channels, each leveraging the municipal utility's structural role as interconnection authority, rate designer, and co-owner to source projects that would stall under a conventional utility structure.

- **Municipal ESPC:** Newark will issue an RFP in early 2026 to select an ESCO for a comprehensive Investment Grade Audit across city facilities as well as community-hosted solar sites, such as the University and school district. The audit bundles solar, BESS, and efficiency measures into a performance-verified portfolio financed through long-term municipal loans repaid from guaranteed energy savings. Newark has already demonstrated this model successfully, financing a \$9.49M project over 19 years, with verified annual inflows exceeding debt service.
- **Community Solar Program:** For approximately half of Newark's population that rents or lacks rooftop access, Newark will develop a subscriber program delivering bill credits from locally sited solar at 100 to 1500 kW per installation. The City's in-house interconnection authority allows it to site, approve, and connect projects faster than the investor-owned utilities in the region. DEMEC provides PPA structures for projects above Delaware's net-metering thresholds, and Energize Delaware offers grants covering up to 70% of project cost for nonprofit participants.
- **Distributed Residential and Commercial Solar + Storage:** A customer incentive program for behind-the-meter solar paired with BESS, targeting residential systems of 5–10 kW solar with 10–20 kWh storage and commercial systems up to 500 kW. Program design, including rebate structures, TOU rates, and demand response terms, will demonstrate viability using the April 2026 feasibility study findings. DNREC provides low and moderate-income solar grants that stack with Energize Delaware financing to reach priority households.
- **University of Delaware Partnership:** The University is Newark's largest employer and electric customer. The City and University are actively identifying rooftop and campus sites for 250 kW to over 1 MW installations, prioritizing critical loads for resilience value. This partnership anchors the institutional segment of the pipeline and establishes a template for Newark's engagement with other large commercial and institutional customers.



Image of community members attending an event, "Solarize," to inform the community on the incentives available for solar in Newark.

PROJECTS SEEKING CAPITAL: PIPELINE ANCHORS

Four projects carry the largest transaction sizes and the most defined capital structures.

Municipal ESCO Portfolio

A portfolio of solar, BESS, energy efficiency, and building systems upgrades across Newark municipal and community facilities structured through an Energy Savings Performance Contract.

- **Capital Stack:** Transaction size \$10M. Long-term municipal financing through ESPC; Energize Delaware co-financing; verified savings as repayment backstop.
- **Revenue Streams:** Guaranteed energy cost savings; SREC sales; reduced operations and maintenance costs.
- **Investment Readiness:** Advanced Predevelopment. ESPC RFP in process; Investment Grade Audit is the next step.

Qnity Electronics – Utility-Scale Solar + Storage

A utility-scale solar and storage installation at an industrial facility, the largest single-site project in the pipeline.

- **Capital Stack:** Transaction size \$6M. Energize Delaware co-financing; private owner equity.
- **Revenue Streams:** On-site generation offsets facility energy costs; potential grid services revenue.
- **Investment Readiness:** Advanced Predevelopment. Active engagement with the site owner is underway.



PROJECTS SEEKING CAPITAL: PIPELINE ANCHORS

Community Solar + Commercial Rooftop Leasing

A community solar program utilizing local space, including leasing agreements with commercial customers.

- **Capital Stack:** Transaction size \$5M. Energize Delaware, DEMEC, and community subscribers as identified capital partners.
- **Revenue Streams:** Solar production reduces utility wholesale power purchase needs, which reduces costs. Customers receive benefits on their electric bills.
- **Investment Readiness:** Advanced Predevelopment. Subscriber base identified with active commercial stakeholder engagement and project planning.

University of Delaware Rooftop Solar + Storage

Solar and battery storage installations across major University of Delaware campus buildings, prioritizing critical loads for resilience.

- **Capital Stack:** Transaction size \$5M. University capital, Energize Delaware, and DEMEC are identified partners.
- **Revenue Streams:** Campus energy cost savings; resilience value for critical university operations.
- **Investment Readiness:** Advanced Predevelopment. Critical load identification and site engineering in progress.



"The City of Newark has long demonstrated a strong commitment to sustainability, supported in part by key grant programs over the past several years. While we have been fortunate to receive such funding in recent years, the availability of resources for sustainable infrastructure is expected to decline in the near future. Programs like the Municipal Investment Fund are essential to ensuring Newark can continue advancing innovative, fiscally responsible sustainability initiatives that benefit our residents today and for generations to come."

— Jeff Martindale, Assistant City Manager – Operations

PROVEN IMPACT & NEXT STEPS

Newark's municipal utility model offers a blueprint for the approximately 2,000 publicly owned electric utilities operating across the United States on how to leverage their structural advantages for accelerated clean energy deployment. The combination of in-house interconnection, proven ESPC financing, active community engagement infrastructure, and a university anchor tenant creates a model that other small municipal utilities can adopt without having to build from scratch.

- **The Financial Unlock:** Newark's ESPC model has already demonstrated that municipal clean energy finance can be self-sustaining: the existing project's inflows exceed its financing payments every year, and verified M&V reporting confirms savings above guaranteed levels. Every dollar invested in the next IGA directly unlocks a larger ESPC portfolio through the same proven structure. The April 2026 BESS feasibility study results will further unlock the distributed and community solar programs by providing the rate design and program economics that make those projects financeable for private developers and individual subscribers.
- **Scale & Replication:** By using the municipal utility as the interconnection authority, REC buyer, rate designer, and project co-owner, Newark demonstrates how smaller municipalities with utility authority can out-execute much larger cities on distributed clean energy deployment. The standardized interconnection agreements, incentive benchmarking, and community solar subscriber model being developed here are directly transferable to other DEMEC member utilities and communities in the ICLEI network.
- **The Strategic Gap:** The completion of the April 2026 BESS feasibility study and the ESPC IGA are the two near-term predevelopment triggers that unlock the full pipeline. For private capital providers, the Municipal ESCO Portfolio at \$10M and the Qnity Electronics installation at \$6M are the clearest near-term entry points, with Energize Delaware already named as a co-financing partner in both.

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.

