

Breaking the Stalling Pattern: How Richmond's Municipal Government Is Unlocking Solar Across Virginia's Capital City

Building a Clean Energy Investment Pipeline in Richmond, Virginia

AT A GLANCE

Investment Priorities

Municipal Rooftop Solar (Behind-the-Meter, 39 properties, 5,000 kW), Richmond Public Schools Solar (14 schools, 5,967 kW), Richmond Housing Authority Portfolio Solar (6 properties, 7,500 kW), Community Center Resilience Hubs with Solar + Storage, Municipal Parking Canopy Solar (Longer-Term)

Pipeline Value

\$79.9M across 77 identified projects totaling 28.6 MW

Key Partners

Community Climate Collaborative (C3, lead); City of Richmond Office of Sustainability; Working Power; Donovan Energy; Virginia Clean Energy Innovation Bank (VCEIB); Bridging Virginia (CDFI); Bridging the Gap Virginia (workforce); Secure Futures; IBEW Local 666

Community Impacts

~22,500 MT CO₂ avoided annually; ~495,000 MT CO₂ cumulative over 25 years (equivalent to removing 5,246 passenger vehicles per year); estimated \$735,000 in first-year savings and \$21M+ in cumulative 25-year savings for the City, multifamily affordable housing owners, and small commercial properties; 300–350 annual worker shortfall identified in regional solar and storage trades — pipeline directly addresses this gap

Strategic Role

Market Enabler / Project Originator

The Path Forward

Cooperative procurement contract was secured by June 2026 to ensure ITC safe harbor for the City of Richmond; predevelopment funding needed to advance the Richmond Housing Authority into its capital plan; commercial solarize campaign ready to launch pending coalition staffing and developer pre-qualification

THE BIG PICTURE

Richmond is the capital of Virginia and a city with commitments to 100% clean energy under the RVAgreen 2050 plan — and a solar market that has not kept pace. Government and commercial buildings account for 46% of citywide greenhouse gas (GHG) emissions. A 28.6 MW distributed solar pipeline sits identified and ready. Yet Richmond's installer market lacks the project volume to sustain local operations, predevelopment capital is nearly absent, and individual project economics are compressed by some of the lowest electricity rates in the Mid-Atlantic combined with depressed Solar Renewable Energy Credit (SREC) values. The MIF gave this coalition the resources to convert a diagnosed market failure into a sequenced, financeable deployment plan.

The Challenge: Richmond's solar market is caught in a mutual-wait problem. Lenders reported active interest in financing solar transactions but almost no local deal flow to underwrite. Installers cited insufficient project volume as the reason they haven't built a dedicated Richmond presence. Without an installer base, projects don't get developed. Without deal flow, lenders stay cautious. Low electricity rates reduce the value of avoided costs, interconnection costs above 250 kW are unpredictable, and Dominion Energy's net metering cap introduces regulatory uncertainty that further dampens private investment in smaller commercial properties and affordable housing.

The Solution: The coalition's response uses the municipal portfolio as the demand anchor that breaks the cycle. Fourteen Richmond Public School rooftops and 39 municipal behind-the-meter (BTM) sites represent over 9.4 MW on creditworthy public-entity sites with controlled procurement timelines. That volume gives installers a reason to invest in Richmond and lenders a deal pipeline worth underwriting. The commercial Solarize campaign and multifamily affordable housing track are designed to follow the municipal anchor — scaling on the market confidence and installer depth it creates. Richmond, as the capital of the Commonwealth, is positioned to lead by example for the entire state.



CRACKING A MARKET THAT HASN'T MOVED

MIF funding enabled the coalition to produce the most complete picture of Richmond's solar market barriers ever assembled — and to build the tools that directly address each one.

- **56-interview market diagnosis across nine stakeholder categories:** The coalition conducted structured interviews with 11 financing partners, 10 solar developers and installers, housing organizations, nonprofits, faith communities, city and state agencies, schools, workforce organizations, and Dominion Energy. Every barrier the plan addresses — predevelopment capital scarcity, low electricity rates, interconnection cost opacity, installer market thinness, Multifamily Affordable Housing (MFAH) financing complexity — was confirmed and characterized through this process.
 - **Impact:** investors and developers can act on this intelligence directly, without repeating the diagnostic work.
- **Portfolio aggregation strategy and standardized contracting tools:** The coalition developed a portfolio-based aggregation framework across all five property types, with standardized PPA and site-lease agreement templates, EPC pre-qualification frameworks, and master service agreement structures designed to reduce legal bottlenecks and enable cooperative procurement under Virginia Code §2.2-4304.
 - **Impact:** aggregating multiple rooftops into a single procurement reduces per-project soft costs, makes otherwise unfinanceable smaller systems viable within a larger deal, and enables bulk equipment purchasing that compresses hard costs across the portfolio.
- **ITC safe harbor sequencing:** The entire near-term pipeline is mapped to the federal investment tax credit (ITC) safe harbor deadline, which required a contract execution or equipment purchase by July 4, 2026, to lock in the 30% credit. The City of Richmond can ride Prince William County Public Schools' existing solar procurement under Virginia's cooperative procurement provisions, enabling a contract execution in a shorter time period without a full independent solicitation.
 - **Impact:** a regulatory deadline that typically freezes institutional decision-making instead becomes a deployment accelerator — the planning work is done, and timing is the remaining variable.
- **Policy intervention framework targeting structural change:** The coalition developed municipal-level policy recommendations that compound the financial case for private investment over time: establishing a multi-year municipal solar deployment target with departmental cost-savings retention incentives, embedding solar requirements in the Affordable Housing Trust Fund (AHTF) and Richmond Affordable Housing Performance Grant, and advocating to strengthen the Low-Income Housing Tax Credit (LIHTC) Qualified Allocation Plan (QAP) solar criteria administered by Virginia Housing.
 - **Impact:** embedding solar into policy processes converts individual project negotiations into standard practice.

- **Commercial solarize campaign design:** A time-bound program targeting aggregated projects of 50 to 250 kW at nonprofits, faith-based organizations, and small businesses — built around developer pre-qualification, LIDAC-targeted outreach, bulk equipment purchasing, and standardized intake. C3 developed a citywide property database tracking roof replacements across the city to identify outreach targets.
 - **Impact:** bundled deal flow solves the volume problem that has kept qualified contractors from committing to the Richmond market.
- **Regional workforce development assessment:** In partnership with Bridging the Gap Virginia and IBEW Local 666, the coalition completed a preliminary workforce landscape assessment for the Richmond-Henrico-Petersburg region, identifying a 300 to 350 annual worker shortfall in solar and storage trades. Labor organizations confirmed they can rapidly scale training capacity if presented with a reliable project pipeline — meaning the workforce constraint is a demand problem, not a supply problem.
 - **Impact:** connecting deployment timelines to workforce pipeline development means the jobs created by Richmond solar stay in Richmond.



FIVE PORTFOLIOS, ONE SEQUENCED STRATEGY

Richmond's 28.6 MW pipeline is organized across five property types at distinct readiness stages, each with a tailored financing and procurement pathway.

- **Municipal BTM portfolio (39 facilities, 5,000 kW, \$15M):** General municipal buildings — offices, libraries, fire stations, community centers, police stations, and utilities operations facilities — where the City's Office of Sustainability has confirmed solar interest and begun roof condition and electrical readiness assessments. "Site lease agreements with 5-year lease terms (and five 5-year renewals), modeled after the City of Roanoke (which also rode the Prince William County Public Schools contract but was held to the 5-year lease limitations as outlined in the Municipal Lease Act). Projects can also be combined with battery storage to advance community center resilience hub goals, energy resilience for first responders, and reliability for critical infrastructure.
- **Richmond Public Schools portfolio (14 schools, 5,967 kW, \$14.92M):** The coalition's highest-urgency near-term opportunity. Fourteen rooftops scheduled for or having recently completed repair or replacement between 2021 and 2026, aggregated into a single procurement. Secure Futures completed 3 MW on 10 Richmond Public Schools in 2018 and has confirmed active interest in a second tranche. PPA structures allow roof replacement costs to be rolled into the solar financing, eliminating separate capital requirements for the school system. Cooperative procurement from Prince William County Public Schools' existing contract creates a fast-track pathway to contracting.
- **Richmond Housing Authority (RRHA) portfolio (6 properties, 7,500 kW, \$18.75M):** The single largest block of capacity in the pipeline. RRHA is in early stages of an Energy Services Performance Contract (ESPC) initiative that can bundle solar with efficiency measures across its portfolio, with guaranteed energy savings covering debt service. Piedmont Housing Authority's Kindewood redevelopment — a 189.2 kW system on three buildings serving 100 units, passing approximately 20% utility savings directly to residents through a master meter and submetering structure — is the active Virginia proof-of-concept. Financing for Kindewood relied on the federal ITC with direct pay and the 20% LMI bonus credit, which together covered roughly half of total system costs.
- **Richmond Department of Public Utilities (DPU) sites (6 sites, 4,588 kW, \$12.07M):** Large utility-owned facilities representing substantial BTM capacity on creditworthy infrastructure. Priority site confirmation and alignment with operational planning are the immediate next steps.
- **Small commercial, nonprofit, and faith-based resilience hubs (2 confirmed sites, 138 kW, \$0.67M):** LIDAC-serving nonprofits as early visible wins that build market confidence before the installer base is fully established. Credit enhancements from VCEIB and Bridging Virginia are designed to make projects financeable that fall below conventional lender minimum deal sizes. The commercial solarize campaign will scale this portfolio significantly.

PROJECT SEEKING CAPITAL — RICHMOND MUNICIPAL GOVERNMENT SOLAR PORTFOLIO

City of Richmond Solar Portfolio — Approximately 5,000 kW of rooftop solar across 39 city-owned facilities with recently repaired or replaced roofs, aggregated into a single procurement. Secure Futures completed a prior tranche of 3 MW on 10 Richmond Public Schools in 2018 and is partnering with the City of Richmond to install more arrays on government rooftops.

- **Capital Stack:** Third-party ownership PPA structure (developer finances, owns, and operates; municipality pays a contracted rate below retail electricity price); 30% federal ITC captured by developer and priced into PPA rate; potential 20% LMI bonus adder for qualifying sites; Virginia energy efficiency grant funding where applicable.
- **Revenue Streams:** Municipal government receives contracted below-market electricity for the 20-year PPA term; developer captures ITC and SREC revenue; Dominion Virtual Power Plant (VPP) pilot expansion creates potential future revenue for battery-paired systems; long-term electricity cost certainty for city budget planning against projected Dominion rate increases.
- **Investment Readiness:** Advanced Predevelopment — preliminary roof condition assessments completed for all 39 sites; Secure Futures has confirmed active development interest; cooperative procurement pathway identified via Prince William County Public Schools' existing contract; ITC safe harbor contract requirement has been met.
- **Timeline:** Contract execution target September 2026 to secure ITC safe harbor; construction through 2027 to 2029; project operations eligible through December 2030 under safe harbor provisions.



PROVEN IMPACT & NEXT STEPS

The Financial Unlock — and a Closing Window

The City of Richmond safe harbor deadline is concrete: a contract executed by September 2026 locks in the 30% ITC for a \$14.92M portfolio. In a low-electricity-rate market where project economics are already thin, the difference between a 30% credit and no credit is the difference between a PPA rate that pencils for a developer and one that doesn't. This is not a background variable — it is the activation point the entire near-term pipeline depends on, and it is live right now.

MIF produced the plan that makes that timeline achievable. The market diagnosis is complete. The aggregation strategy is designed. The cooperative procurement pathway is identified and legally validated. The developer relationships are in place. What the next phase requires is a decision by City Council to approve the 39 site leases and execute the project agreements.

The municipal portfolio is the catalyst. If 5 MW of municipal solar closes in 2026, Richmond installers have the volume justification to invest in local operations. The commercial Solarize campaign — already designed and ready to staff — will have a responsive installer base to execute against. The Richmond Redevelopment Housing Authority ESPC pipeline will have a demonstrated deal template and a growing local SREC market improving project economics. VCEIB and Bridging Virginia will have closed transactions in Richmond to leverage against new capital sources.

Richmond is the capital of a Commonwealth that enacted the Virginia Clean Economy Act and has set some of the most ambitious state-level clean energy targets in the Southeast. Every Virginia municipality watches what Richmond does. A city that demonstrates solar deployment at scale — on its schools, its public facilities, and its affordable housing — becomes the replication model for the ICLEI member network across Virginia and the mid-Atlantic. The plan is done. The window is open. The question is whether the contract is executed in time.

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