How Missoula Built a Whole-Community Clean Energy Pipeline from the Ground Up

Building a Clean Energy Investment Pipeline in the City and County of Missoula, Montana

AT A GLANCE

Investment Priorities

Building Decarbonization & Electrification, Microgrids & Resilience Hubs, Distributed Energy Generation & Storage, Net Zero Transportation, Green Infrastructure

Pipeline Value

$716 million across 37 projects

Key Partners

Clearwater Credit Union; City of Missoula; Missoula County; Missoula Economic Partnership; Climate Smart Missoula; Quantified Ventures; Missoula Urban Transportation District (Mountain Line); University of Montana; Providence St. Patrick Hospital; Missoula Electric Cooperative; NorthWestern Energy; Homeword; NeighborWorks Montana; Missoula Housing Authority; McKinstry; Confederated Salish and Kootenai Tribes; MoFi (a Montana CDFI formerly known as Montana Community Development Corporation); Missoula Redevelopment Agency

Community Impacts

37 projects spanning every MIF category; strong alignment between climate vulnerability and LIDAC designation across Missoula; pipeline prioritizes affordable housing, low-income energy burden reduction, Tribal communities, and workforce opportunities in underserved neighborhoods

Strategic Role

Market Builder | Coalition Convener | Financial Product Designer

The Path Forward

The Missoula community has outstanding commitment from local government, private partners, and nonprofit partners – and we are excited to work with funding partners to make progress on our pipeline projects. Clearwater Federal Credit Union and The City of Missoula are in exploration stages of various purpose-built financial instruments — a predevelopment loan program, a credit enhancement and loan loss guarantee, and a revolving loan fund have been proposed — to move Missoula's $716 million pipeline from identified concepts to financed, construction-ready projects.

THE BIG PICTURE

When the Municipal Investment Fund opened a window to build clean energy investment infrastructure, 19 organizations submitted 37 projects worth an estimated $716 million. Fifty people filled a room for a stakeholder workshop. Over 40 organizations engaged directly — government, hospitals, universities, Tribal nations, affordable housing developers, contractors, and credit unions — not because they were obligated to, but because the demand for clean energy investment in Missoula is real and it has been waiting for somewhere to go. The challenge was never motivation. It was market infrastructure.

The Challenge Missoula's clean energy projects stall at the same predictable points: predevelopment costs with no patient capital to cover them; lenders whose credit parameters don't fit the risk profiles of clean energy deals; financing terms too short for the projects they're meant to fund; and a primary utility — NorthWestern Energy — whose limited net metering program and minimal demand response structures make distributed generation economics harder to pencil. Projects that should get built don't, not because the community doesn't want them, but because the financial plumbing to move them forward doesn't yet exist.

The Solution Clearwater Credit Union, operating as Missoula's clean energy finance anchor, partnered with the City and County of Missoula to design that plumbing. Using a "whole-community" engagement model spanning 40+ stakeholders, the coalition identified five structural financing gaps and designed three interlocking financial instruments to close them — a predevelopment loan program to catalyze early-stage projects, a credit enhancement program to derisk deals for conventional lenders, and a revolving loan fund to sustain and scale deployment over time. Together, these instruments are designed to unlock a pipeline that already exists and is already waiting.

CREATING THE FOUNDATION

A Whole-Community Coalition The core team — Clearwater Credit Union, the City of Missoula, Missoula County, Missoula Economic Partnership, and Climate Smart Missoula, supported by Quantified Ventures — took deliberate aim at breadth. Twenty-six stakeholder interviews across November and December 2025. An in-person workshop in January 2026 with over 50 attendees. A Request for Information disseminated across the full network that returned 37 project submissions. The coalition spans government, advocacy, finance, energy services, institutions, affordable housing, construction, and Tribal communities — a cross-section of Missoula that gave the gaps analysis its credibility and gave the financial product designs their grounding in real project realities.

Five Gaps, Three Solutions The stakeholder process surfaced five structural gaps preventing capital from reaching viable projects: a project cost-to-subsidy gap driven by rising costs and reduced federal incentives; a predevelopment gap where patient early-stage capital is nearly absent from the market; a core instruments gap where construction loans and permanent financing don't match project realities; a financial enhancement tools gap where credit enhancements and guarantees simply aren't available locally; and an energy utility gap where NorthWestern Energy's restrictive net metering limits the revenue streams that make distributed generation projects pencil.

Three financial instruments were proposed in direct response:

> **Catalyze — Soft Costs Predevelopment Loan Program** (amounts from $25K–$500K, 12–24 month terms) to provide patient, flexible capital for predevelopment milestones — feasibility studies, engineering, permitting, legal, community engagement — the work that creates the data room that makes projects lender-ready. Tranched by milestone awards, with a conversion option to construction financing. Without this, projects stay concepts.
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> **Derisk — Credit Enhancement & Loan Loss Guarantee Program** to absorb a defined portion of potential losses on qualifying projects, reducing lender risk to acceptable levels and unlocking private capital that would otherwise sit on the sidelines. Each guarantee dollar would mobilize multiples in conventional lending — the lever that turns a modest public commitment into a market-moving instrument.
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> **Sustain & Scale — Revolving Loan Fund** would create a single, mission-aligned capital gateway that bundles and coordinates projects, lowers transaction costs through standardized documentation, and recycles capital to sustain long-term deployment. The program would make the first two instruments durable over time rather than one-time interventions.

Building the Enabling Environment Alongside financial products, the coalition identified three interventions focused on the enabling environment that – if implemented – would help determine whether the pipeline scales: updates to Missoula's local zoning code to embed clean energy and efficiency provisions; development of a multi-community green tariff program with NorthWestern Energy (and enabled by the Montana Public Service Commission); and crucial state-level enabling legislation to enable more solar options (community solar, a lift in the net-metering cap, aggregate net-metering, etc.). These are upstream conditions that can help determine how many of the 37 projects in the pipeline can ultimately reach financing.

FEEDING THE PIPELINE

The full pipeline spans 37 projects and $716 million across building decarbonization, resilience hubs and microgrids, and net zero transportation. A selection of the most advanced and/or catalytic projects illustrates the range and depth of investment opportunities.

Engen Local Government Building Rehabilitation | $10–25M total / $14-20M financing need In 2023,the City and County of Missoula acquired a historic downtown 120,000 sq ft former federal building to serve as the new heart of local government. The building needs substantial retrofitting and the owners plan solar PV and ground-source heat pump systems, as well as efficient HVAC and shell improvements. Bridging the current funding gap would accelerate rehabilitation of the building and reduce costs. External support could potentially move the project from commonplace sustainability toward net-zero operations, and a landmark and highly visual public decarbonization project at the center of the community. Financing Tools: Federal and state grants, gap financing, tax incentives. Readiness: Finance ready. 15% of funding committed.

Missoula County Geothermal HVAC | $1–5M total / $1.25M financing need Open-loop geothermal heating and cooling for the County Detention Facility — one of the largest County buildings — replacing fossil fuel systems with a low-carbon, cost-stable alternative. A great showcase project with a solid ROI. Design development is complete. Financing Tools: Grant funding, lease financing, federal tax incentives. Finance ready. Design complete.

Franklin Crossing | $67M total / $1.5M financing need Unique public-private partnership that will redevelop land into new 211 permanently deed-restricted affordable units. Tenants will be responsible for their own utility bills (after an allowance), thus it’s critical to ensure that the buildings are designed and built to the highest standards of energy efficiency. Over 86% of funding committed and project is in the pre-development phase. Financing Tools: Junior debt investments, tax credit equity, seller notes, deferred developer fee, bond reinvestment income, Montana Go Housing Fund Loan, Owner Development Fund Loan, Missoula Redevelopment Agency Tax Increment Financing Loans. Expecting closing and construction start of 06/01/27.

Missoula Riverfront Triangle District Energy System | $25–50M total A district clean energy system using geothermal, sewer heat recovery, and solar PV to serve a mixed-use development; possible partners include a planned commercial development (hotel, conference center, condos), a hospital, a bank, and civic buildings. A potential Design-Build-Operate-Own-Maintain model reduces risk and creates long-term energy service revenue. Total cost will depend on the number of stakeholders served by the energy district, the final system design, energy sources selected, and the overall size and scope of the project. The system could open the door for similar energy districts in other parts of Missoula – by showcasing how clean energy infrastructure can reduce costs, improve reliability, support economic growth, and create a more resilient community. Financing Tools: Grant funding, tax equity, federal tax incentives, DBOOM structure. Feasibility studies in progress; LIDAC-designated site.

Wildflower Apartments LIHTC Rehabilitation | $5–10M total / $2.15M financing need Complete rehabilitation of 96 units of affordable housing (Missoula Housing Authority), including upgrades to appliances, lighting, water heaters, furnaces, and electrical distribution. Over 75% of funding committed and project is nearing financial close. *Financing Tools:* LIHTC equity, federal and state grants, supplemental financing. Expected closing and construction start of 09/01/26.

Transit Maintenance, Operations & Administrative Base — Mountain Line | $50M+ total / $10–25M financing need Missoula's urban transit district is replacing its 1980's-era operations base with a purpose-built and LEED-designed facility supporting full fleet electrification, EV charging infrastructure, solar, microgrid capabilities, and, potentially, future hydrogen fuel cell transition. Over 75% of funding is committed, including a $39.6 million federal grant now officially secured. This project is nearing financial close, with the microgrid and clean energy provisions still seeking funding. It represents the pipeline's most advanced anchor investment. *Financing Tools:* Federal Transit Administration grant, revenue bonds, supplemental financing for the clean energy components. Nearing financial close. Financing gap of $10–25M.

Brooks Street Bus Rapid Transit Corridor | $50M+ total Battery-electric BRT along Missoula's Brooks Street corridor, including complete street improvements, BRT stations, a transfer center, and transit-oriented mixed-use development — in partnership with the Missoula Redevelopment Agency and the City. Financing Tools: Federal transit programs, municipal financing, private transit-oriented development capital. Feasibility and pre-development stage.

Missoula Airport Clean Energy Hub | $60M+ total / $40M+ financing need A 12 MW solar array, 4 MW battery energy storage system, and 10 MW Hydrogen Electrolyzer producing 4.8 metric tons of green hydrogen per day — expandable to 40 MW and 20 MT/day — sited at the Missoula Airport and connected to the proposed Pacific Northwest Hydrogen Hub. The location offers ample site development opportunities and provides a Clean Energy Hub for resiliency and decarbonization, located adjacent to the airport. A transformational project that positions Missoula at the intersection of clean power and decarbonization. Financing Tools: Equity, structured finance, federal hydrogen hub funding. Pipeline stage; equity and structured finance partners being engaged.

Climate Ready Schools — Russell Elementary Resiliency Hub | $5-10M total Project would develop this school into a community resilience hub to address unhealthy air, extreme heat, and other emergencies. Russell Elementary draws from and serves an area of Missoula designated as disadvantaged and is used year-round. The project implements urgently needed outdoor site improvements, indoor air cooling, and building efficiency upgrades, and could incorporate new clean energy on site (geothermal and/or solar). Design development stage.

The full pipeline also includes: City of Missoula Public Works Building deep energy retrofit with on-site solar and green stormwater; Missoula County solar installations across public works and fairgrounds facilities; cooperative housing solar at affordable land trust properties; additional opportunities to develop small- or large-scale solar opportunities in Missoula; Hellgate High School geothermal cooling; Hip Strip geothermal district; Bess Reed Stormwater Park resilience hub; Missoula Public Library resilience hub; electric school bus fleet conversion; city fleet EV charging infrastructure; and rural biomass CHP plant at Seeley Lake.

PROVEN IMPACT & NEXT STEPS

Missoula now has something it didn't have at the start of the MIF grant period: a named coalition, a documented pipeline, three purpose-designed financial instruments, and a shared understanding — across 40+ stakeholders — of exactly where the market gaps are and what it will take to close them. The momentum from the grant period is real, and the coalition is actively working to sustain it.

Financial Products Proposed The three-instrument stack — predevelopment loans, credit enhancement, and a revolving loan fund — is designed as a progression. Predevelopment loans get projects to the starting line. Credit enhancement gets lenders to the table. The revolving loan fund keeps capital moving once the first deals close. Clearwater Credit Union, with existing C-PACE experience and deep community lending relationships, could anchor deployment. A first cohort of predevelopment borrowers would be the immediate target.

Whole-Community Momentum The coalition's emphasis on affordable housing developers, community land trusts, and cooperative housing organizations reflects a genuine commitment to LIDAC deployment. The pipeline's strongest near-term projects include affordable housing rehabilitation, public building decarbonization, and transit electrification — investments whose benefits accrue directly to the residents who need energy cost relief most.

Utility Engagement as the Unlock The single biggest structural lever for scaling Missoula's pipeline is NorthWestern Energy. A green tariff program and expanded net metering would change the economics of distributed generation across dozens of projects simultaneously. The coalition's state-level engagement on this front is not a background activity — it is the policy work that determines whether the $716 million pipeline reaches its full potential.

The Strategic Opportunity Missoula has done the hard work: the community is engaged, the projects are identified, the gaps are mapped, and the financial instruments are designed. What remains is capital to deploy them. For lenders, investors, and financing partners looking for a prepared, mission-aligned market in the Mountain West — one with a credit union anchor, a whole-community coalition, a $716 million pipeline, and the organizational infrastructure to move deals — Missoula is ready.

This case study was developed through the Municipal Investment Fund, a partnership between ICLEI USA and CGC to support local governments, Tribes, and their partner not-for-profit organizations in developing public-private partnership plans that accelerate the deployment of capital to clean energy projects.