# Establishing a Building Decarbonization Revolving Loan Fund:

## *A Guidebook for Municipalities in Contra Costa County*


**Contra Costa County Leadership Academy 2024-2025**
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## Guidebook Purpose

**The purpose of this guidebook is to outline the establishment and implementation of a Building Decarbonization Revolving Loan Fund (BDRLF) for municipalities in Contra Costa County. It aims to enable local governments to invest in energy efficiency, renewable energy, and water conservation projects, ultimately reducing greenhouse gas emissions and operational costs. By detailing the operational framework, benefits, and key considerations for implementing a BDRLF, this document seeks to empower municipalities to overcome financial barriers and achieve their sustainability goals while engaging community stakeholders and fostering economic development. Through the proposed strategies, municipalities within Contra Costa County can enhance their resilience against climate change and promote a greener future for residents.**

## Why Consider a Building Decarbonization Revolving Loan Fund?

Local governments in Contra Costa County continually balance demands to improve infrastructure and enhance sustainability with the realities of limited budgets. However, many municipal sustainability initiatives are often shelved due to insufficient funding. Budgets are typically prioritized for essential services, leaving limited room for capital projects focused solely on increasing energy efficiency or resource conservation. Operational budgets face similar constraints, as recurring expenses limit the ability to fund new initiatives.

Building Decarbonization Revolving Loan Funds (BDRLFs) offer a solution by creating a dedicated funding stream for sustainability projects, distinct from traditional capital and operational budgets. This allows municipalities to undertake energy efficiency projects, renewable energy installations, and water conservation measures without jeopardizing other priorities. These funds operate by tracking verified cost reductions from implemented actions and reallocating those savings into a reserve that finances future qualified projects, such as energy system upgrades or water conservation initiatives. ***This self-sustaining approach reduces reliance on traditional capital and operational budgets.***

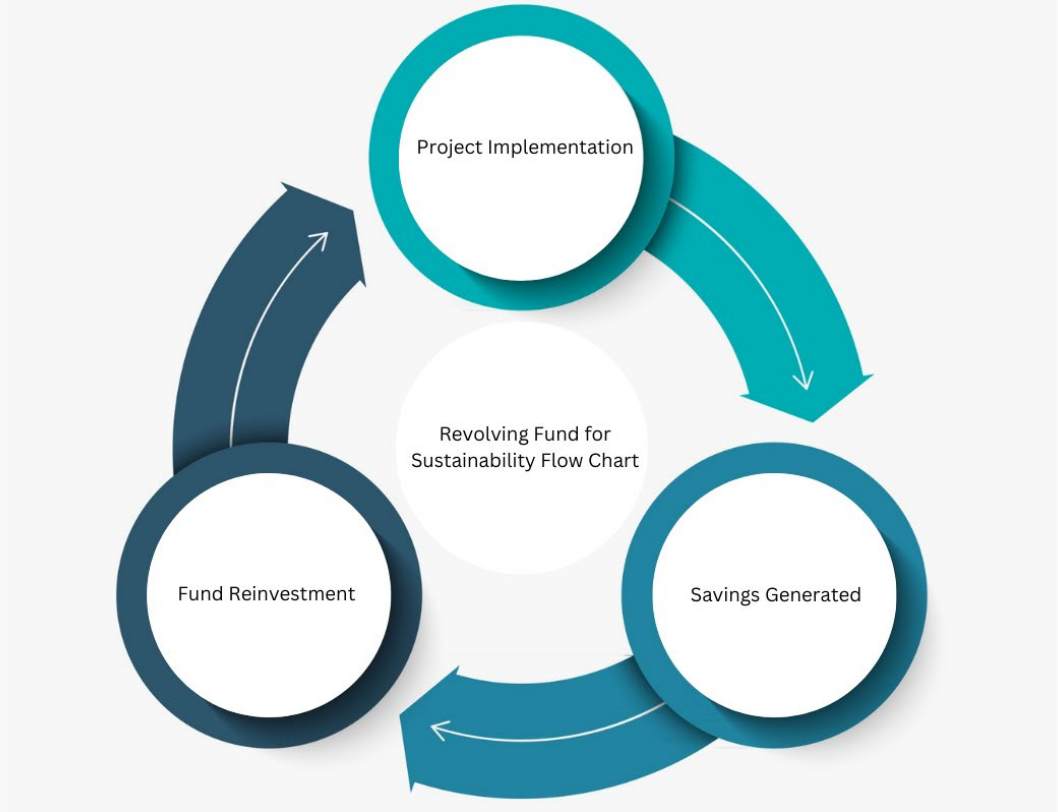
While universities have successfully managed BDRLFs for over a decade, municipalities are increasingly adopting this model to advance their sustainability goals. Unlike institutions requiring specific adaptations for regulatory constraints, Contra Costa County municipalities can customize BDRLFs to fit their unique financial and operational structures, leveraging existing resources and engaging community stakeholders.

### A. How Does a BDRLF Work?

A BDRLF acts as an investment vehicle for financing energy efficiency, renewable energy, and other sustainability measures that reduce resource consumption (e.g., energy, water, or waste) or carbon emissions, and therefore generate cost savings. These savings are tracked and “revolved” back into the BDRLF, maintaining a continuous funding stream for future projects.

***Once established, a BDRLF is self-sustaining and can continue indefinitely, providing resources for sustainability projects without drawing on capital or operational budgets.***

**Contra Costa County BDRLF Flow**




*This flow demonstrates the continuous cycle of reinvestment, ensuring perpetual funding for sustainability projects.*

## B. Key Characteristics of BDRLFs:

1. **Targeted Financing**: The fund must support initiatives that reduce resource use (e.g., energy, water, or waste) or lower carbon emissions (e.g., by installing renewable energy technologies).
2. **Revolving Nature**: Savings generated from operational cost reductions attributed to funded projects must be reinvested to fully repay the initial investment and fund additional projects.
3. **Ongoing Management**: The funds are typically managed by a designated committee or individual responsible for project identification, implementation, performance tracking, and overseeing financial operations.

## C. Determining if a BDRLF is a Good Fit for Contra Costa County Municipalities

BDRLFs are ideal for local governments with ambitious sustainability goals and a willingness to invest in innovative funding models. The development and implementation of a BDRLF typically takes 6 to 18 months, during which resources are secured, stakeholders are educated, and governance structures are

established. Governments with greater budgetary autonomy or streamlined decision-making processes can implement BDRLFs more quickly. Smaller municipalities or those with annual utility costs below $200,000 may find the administrative effort of managing their own BDRLF less cost-effective. In these cases, a countywide BDRLF or state-level initiative may provide a better solution by pooling resources to maximize impact.

### D. Potential Benefits for Contra Costa County Municipalities

The urgency of addressing climate change and reducing greenhouse gas emissions has placed building decarbonization at the forefront of municipal sustainability initiatives. Establishing a building decarbonization revolving fund would be a strategic and impactful tool to accelerate progress toward environmental goals while benefiting residents and local economies. Some potential benefits to consider are outlined below:

- **Accelerating Building Decarbonization Goals**

  Buildings are a major source of carbon emissions, primarily through energy use for heating, cooling, and electricity. Retrofitting existing structures to improve energy efficiency, transition to renewable energy, and electrify systems can drastically reduce emissions. However, high upfront costs often deter property owners from undertaking these improvements. A revolving fund provides low- or no-interest loans to cover these initial expenses, ensuring that decarbonization projects can move forward without significant financial barriers. Once loans are repaid, funds can be reinvested in new projects, creating a self-sustaining financial mechanism that grows over time.

- **Promoting Economic Development**

  By supporting retrofitting projects, a revolving fund stimulates local economic activity. Decarbonization projects require skilled labor, creating jobs in construction, engineering, and technology sectors. Local businesses providing energy-efficient materials and services would also benefit from increased demand. Furthermore, by reducing energy consumption and lowering utility bills, building owners and tenants would have more disposable income, which could be reinvested in the local economy.

- **Advancing Equity and Accessibility**

  A revolving fund can be structured to prioritize historically underserved communities that often face the greatest barriers to accessing green technologies. By targeting low-income neighborhoods and small businesses with tailored financial products and technical assistance, the fund ensures equitable access to the benefits of decarbonization. Improved building efficiency also contributes to healthier indoor environments, reducing energy burdens and improving quality of life for vulnerable populations.

- **Aligning with Policy and Funding Opportunities**

  California has set ambitious climate and energy goals, including achieving carbon neutrality by 2045. A revolving fund for building decarbonization aligns with state policies and positions Contra Costa County municipalities to leverage additional funding opportunities. Programs such as the California Building Decarbonization Program and federal incentives under the Inflation Reduction Act can amplify the impact of a local fund by providing complementary grants, rebates, and technical support.

- **Enhancing Resilience and Sustainability**

  Energy-efficient and decarbonized buildings are more resilient to climate impacts, including heat waves and power outages. Electrification and renewable energy integration, such as installing solar panels and battery storage systems, provide greater energy security for communities. As Contra Costa municipalities face the challenges of adapting to climate change, a revolving fund can help ensure that infrastructure improvements prioritize long-term sustainability and resilience.

  A building decarbonization revolving fund is a pragmatic, scalable solution that can drive significant environmental, economic, and social benefits for Contra Costa municipalities. By addressing financial barriers, fostering local economic development, promoting equity, and enhancing resilience, such a fund represents a vital tool for achieving a sustainable and carbon-neutral future. Policymakers and stakeholders should prioritize its establishment to position Contra Costa as a leader in climate action and community prosperity.

- **Scaling Strategies for a Countywide BDRLF**

  To maximize the impact of Building Decarbonization Revolving Loan Funds (BDRFs), Contra Costa County municipalities can pool resources into a shared fund. Examples of these approaches have been adopted in other cities with benefits for smaller cities with limited capacity while enabling collaboration on large-scale projects. Some examples of such projects are highlighted further on in the guidebook.

- **Engaging and Educating the Public**

  BDRLFs elevate the profile of sustainability efforts by sharing the cumulative benefits of projects (e.g., energy saved, emissions reduced) with residents. This transparency builds community trust and demonstrates effective fiscal management.

## Key Considerations for Implementing a Building Decarbonization Revolving Loan Fund

### A. Stakeholders

- **Local Government Departments**: Finance, Public Works, Community Development, and sustainability teams must collaborate to manage the BDRLF effectively.
- **Utility Providers**: Municipalities must work with energy and water suppliers to verify savings and streamline billing processes.
- **Community Groups**: Municipalities should also consider partnering with environmental organizations and residents to align projects with community needs.

### B. Savings Tracking and Reinvestment

- Establish clear metrics for tracking savings, such as reduced energy consumption, water use, or waste generation**.**
- Use a baseline measurement to compare pre- and post-project performance.

### C. Governance Models

- Create a BDRLF committee that includes representatives from various departments, ensuring cross-functional coordination.
- Develop policies to address equity and prioritize projects benefiting underserved communities.

*By following the steps outlined in this Guidebook and adapting the BDRLF model to local needs, Contra Costa County municipalities can create a transformative funding mechanism that drives sustainability, engages the community, and ensures long-term resource efficiency.*

## Tools for Establishing a Building Decarbonization Revolving Load Fund

### Shared Administrative Tools:

- **Centralized BDRF Management**: Establish a shared governance structure to oversee fund operations across municipalities.
- **Data Tracking Software**: Implement software to measure savings and ensure accurate reporting and cost-saving impacts.

**Illustrative Example of Savings Impact**

| Project | Initial Investment | Annual Savings | Payback Period | 5-Year Savings |
|---|---|---|---|---|
| LED Streetlighting Retrofit | $500,000 | $120,000 | 4.2 years | $600,000 |
| Solar Panels (City Hall) | $250,000 | $35,000 | 7.1 years | $175,000 |
| Smart Irrigation (Parks) | $75,000 | $20,000 | 3.8 years | $100,000 |

*This table showcases potential financial returns on BDRLF -funded projects, emphasizing the long-term value of sustainability investments.*

### *Example – LED Streetlighting Retrofit Potential Savings*:

Municipal governments can calculate the potential savings from switching to LED streetlights using the formula: **Annual Savings = (Ec – En) × Ce + (Mc – Mn)**. In this equation, Ec represents the current annual energy consumption (kWh), En is the new annual energy consumption with LEDs (kWh), Ce is the cost of electricity per kWh, Mc is the current annual maintenance cost, and Mn is the new annual maintenance cost with LEDs. This formula considers both energy savings and reduced maintenance costs. LED streetlights typically reduce energy consumption by about 69% compared to traditional lighting, and their longer lifespan results in significantly lower maintenance costs.

To determine the payback period for the initial investment, municipal governments can use the formula: **Payback Period (years) = Initial Investment ÷ Annual Savings**. For instance, the town of Pepperell, Massachusetts, achieved substantial energy savings by converting to LEDs. Similarly, Phoenix projects savings of over $22 million over 15 years, with annual energy savings of $2.8 million and maintenance savings of $1 million. Other cities have also reported significant savings; New York City estimates annual savings of $14 million ($6 million in energy costs and $8 million in maintenance), while Manchester, New Hampshire, anticipates saving $500,000 annually with 9,000 new LED streetlights.

While actual savings may vary depending on factors such as the number of streetlights, local electricity rates, and the specific LED technology chosen, these examples highlight the financial and environmental benefits of transitioning to LED streetlights. By using these formulas, municipal governments can make informed decisions and estimate their potential cost savings.

## Budget Impacts and Tracking

The creation and deployment of a building decarbonization revolving loan fund (BDRLF) has important implications for both capital and operating budgets of Contra Costa County municipalities.

### Capital Budget Impact:

Any BDRLF revolves over time by reinvesting repayments into additional projects, it can alleviate pressure on future capital budgets. Projects that might traditionally be funded through capital budgets—such as energy efficiency retrofits or renewable energy installations—can instead be financed through the RLF, freeing capital for other municipal priorities.

### Operating Budget Impact:

The monetary savings generated by BDRLF-funded projects, particularly in energy efficiency and renewable energy (EE/RE), typically reduce operating costs. However, for the BDLF to function effectively, these operational savings must be used to repay the fund.

- The most common approach is to allocate a new line item in the operating budget for B BDRLF repayments. This ensures that both the benefits (cost savings) and the costs (repayments) of decarbonization projects are contained within the same budget.
- Alternatively, repayments could be made from the capital budget or another funding category, depending on the municipality's budget structure and preferences.

### Utility Oversight and Savings Allocation:

Municipalities must ensure they can access and track the savings generated by funded projects, particularly when utility payments are managed by a separate cost center, department, or entity. To address this:

- Establish clear management protocols to obtain and analyze utility data.
- Ensure processes are in place to transfer operational savings from relevant accounts to the BDLF for repayment.
- Align these protocols with the municipal budget structure to maintain transparency and efficiency.

By addressing these budgetary considerations, BDLF can become a sustainable financial tool that supports municipalities in achieving their decarbonization goals while maintaining fiscal r

## Governance Structures and Municipal Level of Service

The feasibility and implementation of a building decarbonization revolving loan fund (BDRLF) in Contra Costa County municipalities depend on governance structures, service levels, and stakeholder alignment. This section explores how these factors influence the applicability of an BDRLF and outlines the key considerations for success.

### Governance Structures and BDLRF Applicability

Municipal governance in Contra Costa County can be broadly categorized into two categories:

**General-Purpose Governments:** City or county-operated entities that oversee multiple public services, including infrastructure and utilities.

- These entities benefit from access to diverse departmental resources, including financial and operational expertise, which can facilitate BDRLF development and management.
- Municipalities under general-purpose governance can also issue bonds or leverage general fund allocations to capitalize the BDRLF, ensuring access to upfront funding for decarbonization projects.
- However, the wide span of control may delay decision-making, as priorities must align with broader municipal goals. Creating advisory boards dedicated to decarbonization can help streamline BDRLF development and operation.

**Single-Purpose Entities:** Special districts or commissions that focus solely on specific areas like energy or water management.

- Focused entities, such as utility commissions, can prioritize decarbonization efforts and efficiently implement BDLRF initiatives due to their narrow scope of responsibilities.
- Autonomy in decision-making allows for expedited implementation, though collaboration with other municipal departments is necessary to ensure operational savings are transferred back to the BDLRF.

## Municipal Service Levels and Revenue Streams

The size and revenue diversity of a municipality affect the feasibility and potential scale of an BDRLF:

### A. Small Municipalities with Limited Revenue Streams

- Smaller cities may find it challenging to justify standalone BDLRFs if operational savings are insufficient to cover administrative costs. In such cases, a pooled BDRLF at the county or regional level may provide a cost-effective alternative.
- Stakeholder collaboration is critical to secure buy-in from city councils, utility providers, and community groups.

### B. Mid-Sized and Larger Municipalities with Diverse Revenue Streams

- Larger cities often have greater flexibility to allocate funds for initial BDLRF capitalization and can sustain ongoing operations through operational savings from decarbonization projects.
- These municipalities can retain project savings within their operating budgets, allowing for reinvestment into the BDRLF to support future initiatives.

## Overcoming Split Incentives

Split incentives occur when:

- One party (e.g., a tenant or department) pays for utilities, but another party (e.g., the municipality) owns the building and would need to fund efficiency upgrades.
- Operational savings are not directly reinvested in the RLF, limiting its ability to grow and support future projects.

**Solutions to Address Split Incentives:**

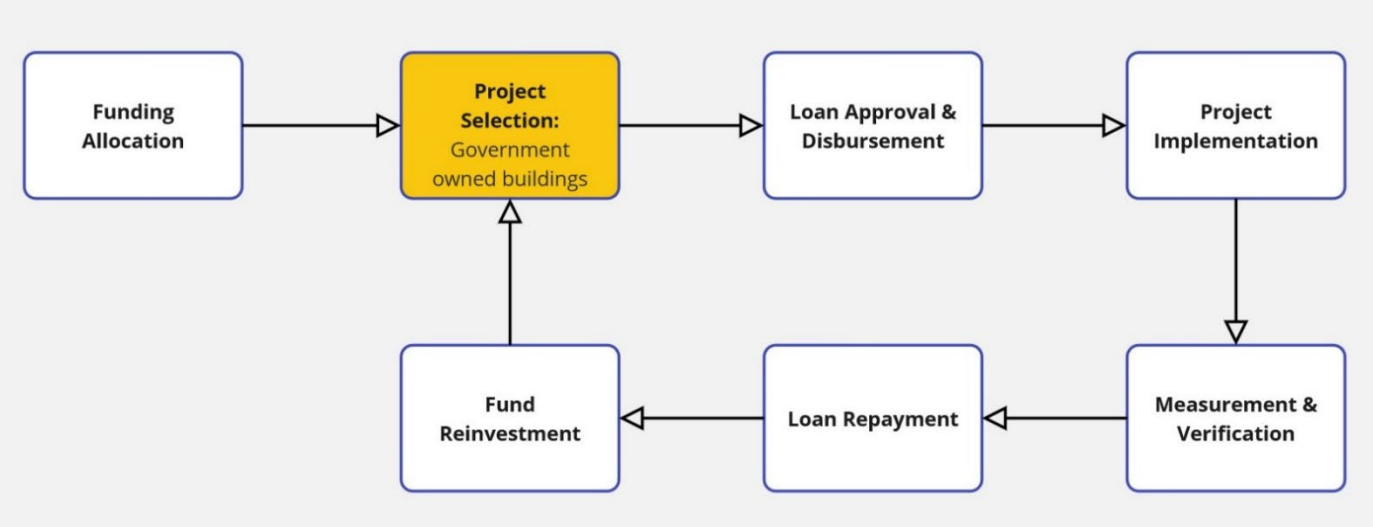
1. 100% Operational Savings Reinvestment: Direct all savings back to the BDRLF until the project's payback period is reached. Afterward, negotiate a shared savings model.
2. Shared-Savings Models: Develop agreements to split savings proportionally between departments or stakeholders based on predefined ratios.
3. Performance-Based Agreements: Set consumption reduction targets and share savings above those levels between the BDRLF and participating stakeholders.
4. Administrative Cost Recovery: Dedicate a portion of savings to cover administrative costs of RLF management before distributing remaining savings.

## Step-by-Step Guide: How to Implement a Building Decarbonization Revolving Loan Fund for Contra Costa County Municipalities

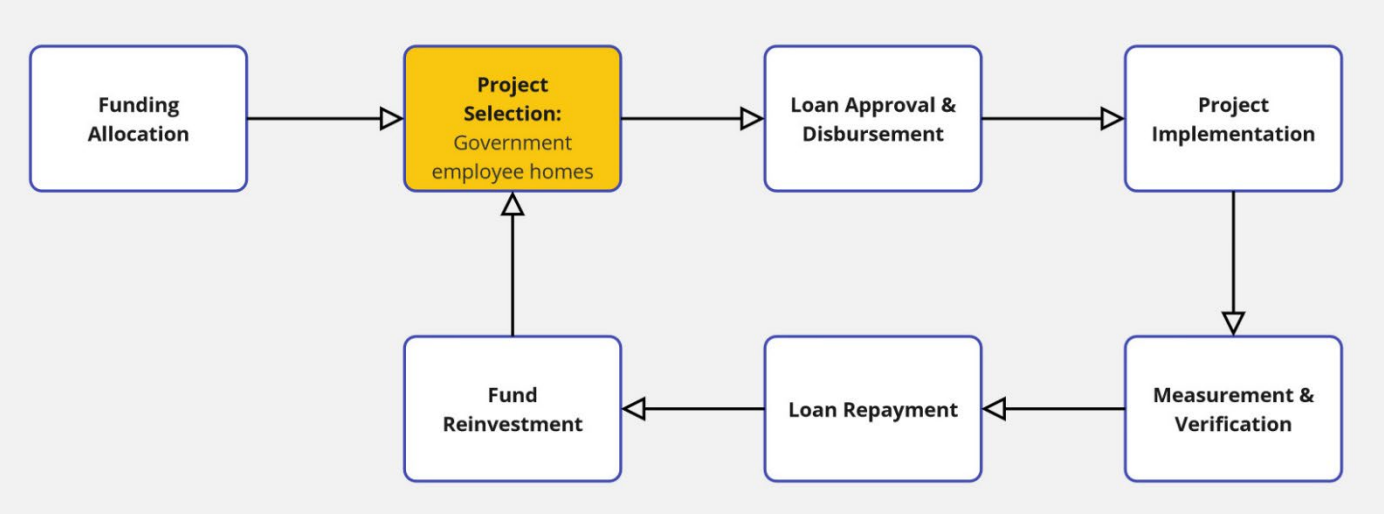
The implementation of a Building Decarbonization Revolving Loan Fund (BDRLF ) requires a systematic approach involving planning, stakeholder engagement, and ongoing management. This guide outlines a 10-step process organized into three phases: Planning, Implementation, and Operations

The 10 steps outlined below can be applied to any of the three BDRLF frameworks below, and can be scaled as needed:

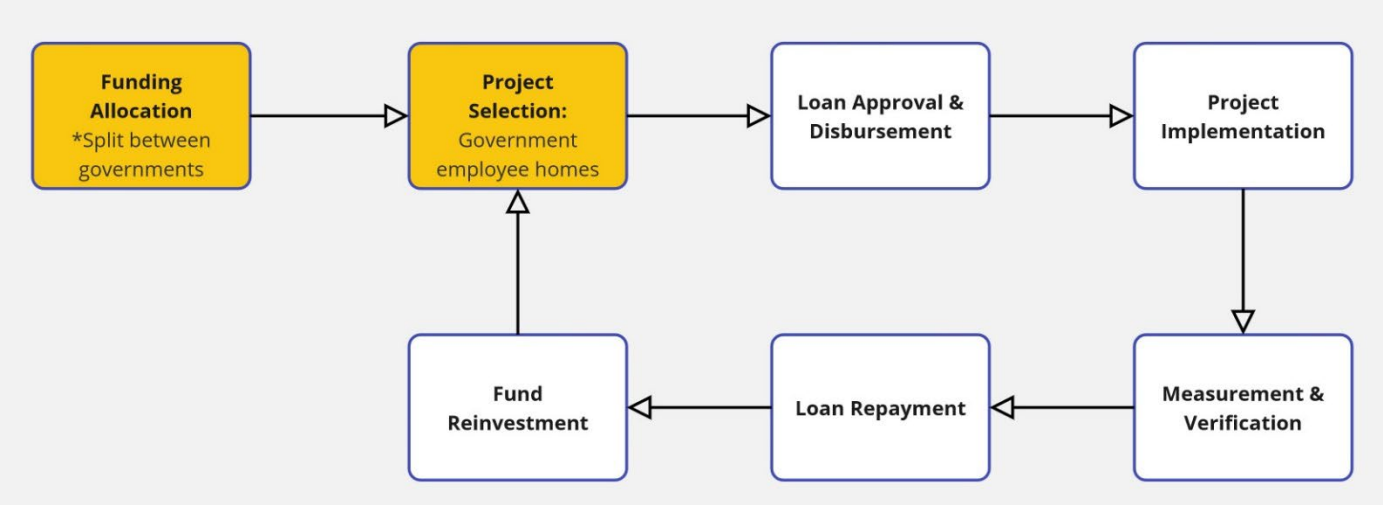
**Framework 1: Public Owned Buildings** – Government pays for government owned building decarbonization.




**Framework 2: Local Employee-Owned Buildings** – Government pays for decarbonization of home of its employees.



**Framework 3: Hybrid Ownership** – Government pays for a % of its employee's home decarbonization by matching remaining % with government of where employee lives.




## Phase 1: Planning

The first four steps of the BDRLF implementation process focus on planning. These steps include preliminary actions such as selecting the appropriate structure and engaging stakeholders to build support.

### Step 1: Perform Research—Understand Local Context

- Create a list of potential projects based on both internal and external funding application frameworks.
- Examine any local Climate Action Plan to assess how the fund may support these goals.
- Compile a list of potential projects, prioritizing those with measurable savings and community impact.
- Conduct energy and resource audits for frameworks to identify potential projects that could be funded through a BDRLF.
- Collaborate with local utilities to schedule no-cost audits or walkthroughs of public buildings to uncover inefficiencies and opportunities for improvement.
- Identify the types of projects typically financed, such as energy efficiency retrofits, electrification initiatives, or renewable energy installations.

### Step 2: Select a BDRLF Model for Capitalization and Operations

In choosing the model, municipalities should consider factors such as their budgetary flexibility, potential project savings, and available funding sources. Early in the development process, outline a tentative structure and mission for the revolving loan fund (BDLF). The fund's design should be adaptable to the unique challenges, opportunities, and priorities of Contra Costa County municipalities. There are no fixed rules for RLF structures, allowing for tailored and innovative approaches.

## BDRLF Capitalization Models

1. **Endowment Model**

   Overview: A dedicated pool of upfront capital is allocated to launch the BDRLF, enabling immediate investment in decarbonization projects.

   Benefits: Quick start to project funding.

   Drawbacks: Requires identification of a funding source (e.g., grants, general funds, or bond revenues) that does not need repayment. Applicability: Best suited for municipalities with access to significant one-time funds or external grants.

2. **Savings Reclamation Model**

   Overview: Initial funding comes from operational savings generated by completed decarbonization projects (e.g., energy efficiency retrofits or renewable energy installations). These savings are redirected to capitalize the BDRLF.

   Benefits: Avoids upfront earmarking of funds and leverages cost savings from existing budgets. Can be paired with revenue-generating projects, such as solar installations.

   Drawbacks: Slower capitalization process, requiring stakeholder buy-in to redirect savings into the fund. Applicability: Suitable for municipalities with limited upfront funding but potential for operational savings.

## BDRLF Operation Models

The operational structure of the BDRLF should align with the municipality's resources, governance, and goals. Below are four potential models:

1. **Internal BDRLF Operation**

   Focuses on internally managed projects where the municipality directly oversees utility costs and retains savings.

   **Process**: A management team evaluates and approves internal projects, releasing funds from an internal budget account. Savings from reduced utility expenses are reinvested in the BDRLF.

   Benefits: Simplest to implement; minimal legal or administrative overhead.

   Drawbacks: Limited to internal projects; excludes external stakeholders.

2. **External BDLF Operation**

   Project funds are managed by external entities, such as third-party operators or community organizations.

   **Process:** Requires an application and review process, lending agreements, and structured repayments from external partners.

Benefits: Expands the pool of eligible projects and partners.
Drawbacks: Higher administrative and legal requirements for managing external relationships.

3. **Hybrid Internal-External BDRLF Operation**

Combines internal and external models, starting with municipal projects and gradually expanding to include external stakeholders.

Benefits: Allows scalability and flexibility as the BDRLF grows.
Drawbacks: Requires careful management to balance internal and external priorities.

4. **Utility Rate-Base Recovery Model**

Uses utility rate structures to manage repayments. For example, utility savings generated from funded projects could result in rate adjustments to recapitalize the fund.

Benefits: Integrates existing utility billing systems and incentivizes energy efficiency.
Drawbacks: Requires alignment with utility providers and potential modifications to rate-setting practices.

### Step 3: Engage Key Stakeholders

Engaging stakeholders should be iterative and collaborative, beginning with a concept proposal. This can take the form of a document, presentation, or set of talking points. Stakeholder discussions should include city managers, finance and sustainability officers, and utility coordinators. The goals at this stage are to:

- Involve local leaders, department heads, and community organizations to build support.
- Partner with utility providers to streamline processes like bill tracking and energy savings verification.
- Ensure all relevant parties (e.g., finance, public works, and sustainability teams) understand their roles in project selection and fund management.
- Identify logistical, political, and financial barriers to implementation.
- Stakeholder Engagement and Decision-Making

1. **Who are the potential key stakeholders?**

- **Elected Officials**: Their support is crucial for securing initial funding and aligning the RLF with climate action plans.
- **Department Head:** Streamline processes and enhance the efficiency of operations, ensuring alignment with the city's strategic goals.
- **Finance Departments**: Collaborate to integrate BDRLF repayments into operating budgets and identify opportunities for cost-sharing across departments.

- **Utility Providers**: Ensure access to energy data and savings allocation, particularly when utilities are managed externally.
- **Community Advisory Committee**: Establish a committee with representation from the community and community-based organizations to provide oversight and maintain accountability while ensuring alignment with local climate goals

2. **Understanding Stakeholder Priorities:**

- Analyze each stakeholder's goals, performance metrics, and concerns.
- Highlight how the BDRLF aligns with their objectives, such as reducing operational costs, achieving climate action targets, and improving community resilience.

3. **Mobilizing Stakeholders**

- Use a written proposal (building on the concept developed in Step 2) as a foundation for discussion.
- Continuously update the proposal based on stakeholder feedback to ensure alignment with their needs and expectations.

4. **Early and Ongoing Engagement:**

- Facilitate regular meetings with key stakeholders during the proposal refinement process.
- Address logistical, political, and financial barriers while building momentum and support.
- Foster collective ownership by involving stakeholders in decision-making at every stage.

5. **Building Stakeholder Buy-In**
   - **Highlight Shared Benefits:** Emphasize cost savings, improved operational efficiency, and contributions to climate action goals.
   - **Demonstrate Tangible Impacts**: Use case studies, pilot projects, or financial projections to show the BDRLF's potential for success.
   - **Create a Collective Vision**: Frame the BDRLF as a collaborative effort to achieve mutual objectives.
   - **Engage Champions**: Identify stakeholders who are enthusiastic about decarbonization and leverage their influence to promote the BDRLF.

6. **Focus on tailored communication**
   - Elected Officials: Emphasize how the BDRLF supports public commitments to sustainability and fiscal responsibility.
   - Finance Teams: Provide clear metrics on ROI, payback periods, and projected savings.
   - Community Members: Highlight co-benefits such as improved air quality, economic development, and energy resilience.

7. **Present Co-Benefits**
    - Increased resilience to energy disruptions through renewable energy and storage investments.
    - Enhanced public trust and participation in municipal sustainability efforts.
    - Long-term cost reductions that free up municipal budgets for other priorities.

8. **Structuring Stakeholder Agreements**

    - Define how savings will be captured and reinvested.
    - Outline the roles and responsibilities of all parties involved.
    - Include performance metrics and reporting mechanisms to ensure transparency and accountability.

### Step 4: Develop Governance and Procedures

By leveraging established models and tailoring the fund's structure to local municipal needs, Contra Costa County can expedite the development process. This approach enables the creation of a robust, impactful revolving loan fund that drives building decarbonization.

- Create a BDRLF committee or designate a champion responsible for fund oversight.
- Establish transparent policies for project prioritization, fund disbursement, and savings reinvestment.
- Integrate the BDRLF into municipal sustainability or strategic planning documents to ensure alignment with long-term goals.
- Assess the municipality's existing governance structure and funding mechanisms.
- Identify potential funding sources (e.g., utility rebates, grants, or reallocated budgets) and understand any limitations or regulations associated with them.
- Examine municipal and regional climate and sustainability goals, including climate action plans and greenhouse gas (GHG) reduction targets, to align the fund's objectives.
- Evaluate existing utility service arrangements across municipalities—whether services are centralized or decentralized—and their implications for decarbonization projects.
- Map internal municipal finance processes to understand how funds are distributed, managed, and reported. This includes determining whether individual departments or projects will require dedicated accounts.
- Identify stakeholders involved in municipal facility operations and project financing. These may include city planners, utility providers, financial officers, and elected officials. Securing their buy-in will be crucial for successful implementation.
- Assess the current state of energy efficiency in municipal buildings. Review existing energy audits and reports to pinpoint opportunities for retrofits, upgrades, and decarbonization projects.

1. **Fund Oversight**
   Select a governance model that balances stakeholder engagement with operational efficiency. Options include:

a. **Management Committees:** A cross-departmental team oversees the BDRLF, ensuring diverse expertise and accountability.
b. **Dedicated Staff:** A single manager or department takes responsibility for fund operations, streamlining decision-making.

2. **Establishing a Charter:** Develop a formal BDRLF charter to document governance, project criteria, and operational procedures. This ensures transparency and provides a framework for future fund management.

3. **Setting Up Financial Structures:** Define clear processes for:

    a. Fund Allocation: Identify who approves and disburses funds for projects.
    b. Repayment: Specify repayment terms, schedules, and responsibilities.
    c. Accounting: Align the BDRLF with municipal financial systems to simplify tracking and reporting.

**4. Implementing Financial Practices for BDRLFs**

a. **Standardize Accounting Practices**
    i. Develop a system for tracking financial flows related to the BDRLF. Ensure that savings generated from funded projects, rebates, tax credits, and other incentives, are returned to the BDRLF account for reinvestment.
    ii. Account for all costs, including materials, labor, and soft costs (e.g., contractor designs or environmental reviews).

5. **Assign Accountability**
    a. Identify which departments will handle BDRLF accounting, financial reporting, and project savings tracking.
    b. Ensure collaboration between departments, particularly finance, public works, and sustainability teams.

6. **Maintain the Circular Flow of Capital**
    a. Capital flows out of the BDRLF for project implementation and is replenished by verified savings.
    b. This cyclical structure ensures the BDRLF remains self-sustaining and can fund future initiatives.

7. **Audit and Report**
    a. Regularly audit BDRLF transactions to ensure compliance with municipal accounting standards.
    b. Publish annual reports to maintain transparency and demonstrate the BDRLF's impact.

## Phase 2: Implementation

Once the BDLF structure is finalized and stakeholder support is secured, municipalities can proceed with fund activation. The next steps include securing seed capital, establishing governance and procedures, and launching the fund.

### Step 5: Secure Initial Funding

Securing seed capital is essential for launching an BDRLF. This step involves identifying funding sources to support both the initial investments (seed capital) and the fund's operating expenses (operational capital). Operational costs are typically minimal, as existing municipal staff often manage the fund as part of their regular duties. Begin this process early to accommodate any necessary approvals. The required size of the BDRLF will depend on the volume and scope of projects identified during Step 3.

- Identify funding sources such as state or federal grants (e.g., California Climate Investments), utility rebates, or reallocated municipal funds.
- Engage private sector partners or non-profits for co-funding opportunities.

Funding sources can be mixed and matched to meet the municipality's unique needs. These sources are categorized into three tiers based on ease of access and compatibility with BDRLF models.

**Tier 1: Most Compatible and Accessible Sources**

1. **Municipal Revenue**
   - Revenue from property taxes, utility fees, development impact fees, permit fees, or parking charges can serve as seed or operational capital.
   - Aligns with municipal goals for energy efficiency and sustainability.

2. **Operating Budgets**
   - Simplifies accounting by funding the BDRLF directly from operational savings (e.g., reduced utility costs from energy-efficient upgrades).
   - Can be structured as a one-time allocation or recurring budget line item.

3. **Capital Budgets**
   - Allows for long-term investments in municipal infrastructure, such as building electrification or solar installations.
   - Contributions can be structured as one-time endowments or recurring allocations.
4. **Bonds**
   - General obligation or revenue bonds can provide significant seed capital, especially for large-scale projects.
   - Interest rates and repayment terms should align with the BDRLF's anticipated cash flow from project savings.

**Tier 2: Restricted or Less Accessible Sources**

1. **State and Federal Grants**
    - Grants for energy efficiency or renewable energy projects can indirectly fund the BDRLF through savings reclamation.
    - Examples include the California Energy Commission's grants or federal programs like the DOE's Weatherization Assistance Program.
2. **Green Banks**
    - Public or quasi-public entities can provide seed funding for clean energy projects.

**Tier 3: Additional or Specialized Sources**

1. **Mission-Driven Investments**
    - Foundations focusing on sustainability may offer grants or low-interest loans as seed funding.
2. **Carbon Charges**
    - Municipalities could implement a carbon charge to support decarbonization projects, though this may require extensive stakeholder buy-in.

**Choosing the Right Funding Source**

Select funding sources that align with the following criteria:

- Compatibility: Sources should fit with the BDRLF's capitalization model and project pipeline.
- Accessibility: Prioritize sources with minimal administrative hurdles and clear pathways to approval.
- Stakeholder Impact: Consider how funding decisions affect internal and external stakeholders, including municipal departments, community groups, and elected officials.

### Step 6: Establish Fund Governance and Accounting Systems

- By leveraging established models and tailoring the fund's structure to local municipal needs, Contra Costa County can expedite the development process. This approach enables the creation of a robust, impactful revolving loan fund that drives building decarbonization.
- Ensure financial systems are robust enough to handle BDRLF accounting and reporting requirements.
- Develop mechanisms to track savings and ensure they are redirected to the BDRLF

### Step 7: Launch the Fund

**When launching the BDRLF:**

1. Prepare for the First Funding Cycle: Use insights from earlier planning to pre-select projects and refine operational workflows.
2. Develop Outreach Tools: Create resources such as a fund website, community presentations, and project templates to engage stakeholders.
3. Monitor and Evaluate: Establish performance metrics and review processes to ensure the BDRLF operates effectively and achieves its goals.

**Formalization:**

1. Draft bylaws, memoranda of understanding, and project evaluation criteria.
2. Ensure all stakeholders have access to these guiding documents.

**Visibility:**

1. Highlight early successes through case studies and progress reports.
2. Promote the fund's benefits to build momentum and attract additional investments.

## Phase 3: Operations

BDRLF Project Implementation and Ongoing Management Once the RLF begins making investments and projects are underway, it is crucial to track performance, ensure projects meet expectations, and continuously improve fund management. This phase involves three key steps:

- Implementing Projects,
- Monitoring, analyzing, and tracking performance, and
- Optimizing and expanding the BDRLF.

### Step 8: Implement Sustainability Projects

Begin with a "soft launch," focusing on straightforward projects with experienced managers to minimize risks and build momentum. Maintain close communication with project managers, facility teams, and contractors to monitor implementation and troubleshoot challenges. Document successes and challenges to refine processes and build credibility for the BDRLF.

**Project Selection**: Use energy audits, deferred maintenance lists, or community proposals to identify projects. Prioritize projects with clear benefits aligned with the RLF's goals, such as greenhouse gas (GHG) reduction, energy savings, or community engagement.

**Environmental Considerations**: Review projects for compliance with local, state, and federal regulations, including any necessary environmental reviews. Projects like retrofits within existing facilities may require

minimal review, while new construction may require more detailed assessments. Develop a prioritized list of projects based on cost savings, environmental benefits, and community impact.

### Step 9: Monitor, Analyze, and Track Performance

Use spreadsheets or software to track BDRLF performance, including project payback, annual savings, and overall return on investment (ROI). Benchmark against other municipalities to identify best practices and areas for improvement. Update forecasts annually to align with evolving fund performance and future project pipelines. Consider the following when monitoring your BDRLF:

1. **Savings Measurement:** Track savings in measurable units like energy reductions (kWh or therms) rather than costs, as utility prices can fluctuate. Use submeters where possible and establish baseline data before implementation.
2. **Verification**: Perform measurement and verification (M&V) to ensure projects achieve expected results. Options include:
3. **Front-End Estimates**: Use engineering projections for simplicity.
4. **Retroactive M&V**: Meter and analyze post-implementation performance for accuracy.
5. **Balance Accuracy with Resources**: Tailor M&V efforts to project scale and budget.

### Step 10: Optimize and Expand the BDRLF

**Continuous Improvement**

- Regularly review and update the RLF's charter, governance, and project criteria.
- Adjust strategies to address underperforming projects, expand the fund, or incorporate new stakeholder groups.

**Key Questions for Optimization**:

- Are project criteria still effective, or should they be adjusted to reflect new opportunities?
- Which projects are most successful, and can these be scaled or replicated?
- Is the fund fully utilized, or are additional capital sources needed for expansion?
- How can reporting and stakeholder engagement be improved?

**Internal Guidance Questions**

- **Fund Management**: Are communication and staffing sufficient to support the RLF? Are roles clearly defined, and are stakeholders fully engaged?
- **Project Performance**: Are criteria appropriate, and are projects achieving expected savings? Could bundling projects enhance outcomes?
- **Financial Tracking**: Are repayments on schedule, and is the fund independent of annual budget decisions?
- **Measurement and Verification**: Are M&V processes effective, and do they need updating?

**Highlighting Achievements**

- Showcase successful projects in public reports, websites, or campaigns to build awareness and support for the RLF.
- Use performance data to demonstrate progress toward municipal sustainability goals and attract additional investments.

## Conclusion

Building decarbonization revolving loan funds (BDRLFs) offer a promising pathway for municipalities in Contra Costa County to achieve sustainability goals. These funds provide a self-replenishing financing mechanism to support energy efficiency, renewable energy, and other decarbonization initiatives. While some initial challenges may arise, BDRLFs have the potential to unlock significant environmental and financial benefits when thoughtfully implemented.

BDRLFs can be launched without new capital by redirecting savings from existing efficiency projects. This approach allows municipalities to start small and grow the fund over time. Though some stakeholders may be unfamiliar with BDRLFs, effective communication and collaboration can build understanding and support. Engaging key stakeholders early and aligning the fund's design with local priorities is critical to its success.

For smaller municipalities with limited budgets, a regional or county-level RLF could provide a shared model that pools resources and simplifies implementation. This collaborative approach enables smaller entities to participate in decarbonization efforts without bearing the full administrative burden.

BDRLFs have already proven successful in higher education and municipal settings, offering a reliable and flexible framework for sustainability financing. Early adopters in Contra Costa County can lead the way, demonstrating the viability of this model and inspiring wider adoption across the region. Champions of this approach must be prepared to navigate uncertainties and work across departments to establish the fund, but the long-term rewards—reduced emissions, lower energy costs, and community resilience—make this effort worthwhile.

By embracing BDRLFs, Contra Costa County municipalities can drive meaningful progress toward a low-carbon future while creating a scalable model for sustainable financing.

## Potential Projects for Contra Costa County Municipalities to Consider

Here are examples of projects municipalities in Contra Costa County can prioritize, categorized by resource type:

### Energy Efficiency Projects:

1. **LED Streetlighting Retrofits**: Replace traditional streetlights with energy-efficient LEDs, saving up to 70% on energy costs.
2. **Public Building Upgrades**: Install modern HVAC systems and smart thermostats in municipal offices.
3. **Solar Installations**: Equip city halls, libraries, or community centers with rooftop solar panels.

### Water Conservation Projects:

1. **Smart Irrigation Systems**: Use weather-based sensors to reduce water usage in public parks and recreation areas.
2. **Reclaimed Water Reuse Systems**: Capture and recycle water from sinks or showers in public facilities for irrigation purposes.

### Waste Reduction Initiatives:

1. **Composting Programs**: Create facilities for municipal composting, diverting organic waste from landfills.
2. **Recycling Infrastructure**: Install smart recycling bins in public spaces, integrated with waste analytics tools.
3. **Zero-Waste Community Events**: Promote sustainability by offering reusable alternatives at city-sponsored events.

### Other County-wide Collaborative Projects:

1. **Regional Solar Farms**: Install solar arrays and battery storage on unused land, providing renewable energy to multiple municipalities.
2. **Electric Vehicle (EV) Infrastructure**: Build a unified network of EV charging stations to serve residents and municipal fleets.
3. **Stormwater Management**: Develop countywide solutions to address flooding risks and improve water quality.

## Case Studies and Lessons Learned

### Case Study #1: Lessons from Higher Education and Municipalities

The success of BDRLFs in catalyzing investment into energy and resource efficiency projects is well-documented, particularly within higher education institutions and municipalities. Examples from Harvard University, Denison University, and Lane Community College illustrate the versatility and effectiveness of BDRLFs in academic settings, while the City of Santa Barbara demonstrates how municipalities can adapt the model to meet their unique needs.

These case studies from higher education and municipal governments provide several valuable lessons for Contra Costa County municipalities when considering the BDRLF model:

#### Lesson 1: Start Small to Build Confidence

- **Harvard University**: Began with a smaller BDRLF to prove its value before scaling up. This low-risk approach allowed stakeholders to see tangible results before committing additional resources[1].
- **Application for Contra Costa**: Start with a pilot BDRLF focused on a specific project, such as retrofitting city hall with energy-efficient lighting, to build stakeholder confidence.

#### Lesson 2: Consider Operational Flexibility

- **Denison University**: Operated its BDRLF successfully without initially having robust tracking and measurement systems. By relying on estimates for project savings, Denison demonstrated that it's possible to begin without comprehensive metering.[2]
- **Application for Contra Costa**: Local governments can launch a BDRLF based on projected savings from simple measures, such as smart irrigation systems, and improve tracking systems over time.

#### Lesson 3: Establish Clear Guidelines and Budget Separation

- **Lane Community College**: Emphasized the importance of establishing clear fund guidelines and keeping the BDRLF account separate from other budgets to protect it from competing priorities.[3]
- **Application for Contra Costa**: Set up a dedicated BDRLF account with clear policies on project selection and savings reinvestment to ensure fiscal discipline.

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[1] "Harvard University: Our Plan." Harvard Sustainability, Harvard University, https://sustainable.harvard.edu/our-plan/. Accessed 17 Dec. 2024.
[2] "Denison University Sustainability & Climate Action Plan." Denison University, https://denison.edu/forms/sustainability-climate-action-plan. Accessed 17 Dec. 2024
[3] "Lane's Green Revolving Fund." Lane Community College, https://www.lanecc.edu/about-lane/college-initiatives/institute-sustainable-practices/lanes-green-revolving-fund Accessed 16 Jan. 2025

### Lesson 4: Leverage Existing Savings to Capitalize the Fund

- **City of Santa Barbara***: Identified a better utility rate structure during the BDRLF setup process, generating $60,000 in savings, which was used to capitalize the fund.[4]

- **Application for Contra Costa County**: Perform utility audits to uncover hidden savings opportunities, using those savings to seed the BDRLF .

***Municipal Insights for Contra Costa County:** The City of Santa Barbara's BDRLF demonstrates that municipalities with a backlog of energy efficiency projects can leverage those opportunities to establish a sustainable funding mechanism. Contra Costa County municipalities can replicate this approach by identifying and prioritizing resource efficiency projects that deliver quick returns, such as LED retrofits or water conservation measures.*

## Case Study #2: Lessons from Airports

Although BDRLFs are relatively new in the airport sector, their application highlights valuable lessons for municipalities:

### Lesson 1: Securing Seed Capital

- **Hartsfield-Jackson Atlanta International Airport (ATL)**: Explored creative funding sources, such as utility rebates, voluntary charges for travelers, and city-level revolving funds. However, the BDRLF 's modest initial size limited its ability to demonstrate sufficient impact.
- **Application for Contra Costa County**: Governments can explore utility rebates, state grants, or private partnerships as potential seed funding sources. Ensuring projects are of sufficient scale to justify tracking savings is critical to demonstrating the BDRLF 's value.

### Lesson 2: State-Level Collaboration

- **Virginia Airports Revolving Fund (VARF)**: Provides loans to airports across the state for various projects. While not specific to sustainability, the centralized administration of VARF reduces administrative burden and supports smaller entities.
- **Application for Contra Costa County**: Smaller municipalities in the county could benefit from participating in a countywide BDRLF to pool resources and simplify administration, similar to a state-level model.

[4] "Implementation Plan" Santa Barbara Clean Energy, City of Santa Barbara, https://sustainability.santabarbaraca.gov/utilities/santa-barbara-clean-energy/about-sbce/key-documents Accessed 16 Jan. 2025

## Recommendations for Contra Costa County Municipalities

Drawing from these case studies, Contra Costa County municipalities can implement BDRLFs effectively by:

1. **Starting with High-Impact Projects**: Focus on projects that deliver measurable savings, such as installing solar panels on municipal buildings or converting streetlights to LED technology.
2. **Building Stakeholder Buy-In**: Demonstrate initial success through pilot projects to gain support from local leaders, residents, and businesses.
3. **Exploring Centralized Models**: Smaller cities may find it advantageous to collaborate on a countywide BDRLF , sharing administrative duties and pooling resources for larger-scale projects.
4. **Leveraging Local Expertise**: Partner with community organizations, utility providers, and private entities to identify funding sources and technical solutions.

# Appendices

## Sustainability Revolving Fund Program Charter

| | |
|---|---|
| **Date & Version** | {Approval Date & Version Information} |
| **Purpose** | The {Agency Name} has made sustainability a priority, for both internal operations and the broader community. The purpose of the Sustainability Revolving Fund (SRF) is to provide a source of funds to support sustainability projects. It is supported by capturing and tracking savings from cost-saving projects and utilizing some of those savings for subsequent projects. The fund provides a resource for employees to access funds for internal sustainability projects, and a structure for use, replenishment, and management of those funds. |
| **Scope** | In order to achieve {Agency Name}'s sustainability and environmental stewardship goals, sustainability-focused projects need to be implemented by City departments. Funding for the projects may come from existing departmental budgets, but the need for a dedicated funding source as well as a means to capture project savings has been addressed with the creation of the SRF. |
| **Responsibilities** | The City's Office of Sustainability manages the SRF program. Applications are reviewed by five staff including Finance Director or delegate, a Senior Leadership Team representative, and a representative from the Office of Sustainability. The SRF shall be administered as outlined in the Appendix. |
| **Goals** | The SRF will support projects that:<br>• Demonstrate an economic, environmental and/or social equity return on investment<br>• Directly address one or more of the City's sustainability or environmental stewardship goals included in the SRF Application<br>• Primarily cover equipment, materials and other 'hard' costs that have a high impact; other costs may be covered but should be the exception and justified in the proposal |
| **Program Structure** | The SRF is structured in levels, so any employee can access funds for sustainability efforts. Committee members who are involved with developing project proposals must remove themselves from the application review process. Proposals shall be coordinated with any departments responsible for implementing the project to ensure there is staff capacity and support. Goals and requirements for SRF grant funding include:<br>• Small grant request (up to $2,500). Projects that require relatively small investments and that may not realize cost savings but directly or indirectly address at least one sustainability goal.<br>• Medium grant request ($2,501 – $10,000). Projects must directly address at least one sustainability goal and ideally will realize cost savings or avoided costs.<br>• Large grant request ($10,001 – $25,000). Projects must directly address two or more sustainability goals and demonstrate significant cost savings or avoided costs. |
| **Program Limitations** | 1. No single proposal may request more than $25,000.<br>2. Proposals should be considered in the context of total funds available.<br>3. Proposals that demonstrate leveraged funds from City or external sources will be prioritized. Leveraged funds must be secured for the project at the time of the proposal and not assumed to become available. |

4. Proposals that request funds to replace, repair, or supplement existing assets or programs will not be funded if Executive staff have indicated the project is not one the City should be expending funds on during the budget-setting process or through other feedback.
5. Proposals will not be accepted for requests that have been previously approved and funded through SRF unless they have proven to be successful and could demonstrate value in another part of the organization**.**

**Review Process**

1. Applications are submitted to the City Manager's Office {Contact Information}

2. Applications are accepted throughout the year and reviewed on a rolling schedule by the SRF Committee.
3. Applications are scored against the established criteria in the SRF Application and approved if they receive at least an average of 85% of the total possible points across all committee member scores. Small grant requests are deemed pass/fail based on meeting program goals and may be approved at a lower score rate.
4. Applications may be approved as presented or approved with modifications that help the project better fit the program goals (if the proposer agrees to the changes).
5. The Office of Sustainability provides feedback to applicants about their proposals in a timely manner and indicates where a proposal fell short if it is not approved.

**Committee Membership & Roles**

| Department / Functional Area | Representative |
|---|---|
| City Manager's Office / Sustainability | |
| City Manager's Office / Sustainability | |
| Public Works / Facilities & Fleet | |
| Finance / Administration | |
| Finance / Procurement | |
| Information Services | |

+ Committee facilitator/program manager

**Committee Authority**

The committee derives its authority from City's Executive Leadership. Decisions and recommendations are made by consensus building and not by individual members. Recognize and appreciate the unique expertise of the group members to help guide decision-making.

**Committee Participation**

**New Member Selection.** Members are recommended by the team and are approved by the committee facilitator (or designee). Appointments must represent the department/ functional areas outlined in the Committee Membership & Roles section but also represent the City as a central entity.

**Ad Hoc Attendees.** Ad hoc attendees may be requested in order to provide subject matter expertise as needed if a department who is not part of the application or SRF committee may be impacted by a project.

| (SIGN & DATE) | (SIGN & DATE) | (SIGN & DATE) |
|---|---|---|
| CITY MANAGER (or designee) | EXECUTIVE SPONSOR | PROGRAM MANAGER |

## Sample Appendix: Fund Establishment and Management

The Sustainability Revolving Fund was established and is maintained through savings incurred by installing new sustainability projects. Savings occur through increased resource efficiency, which lowers future operating and maintenance costs.

The SRF is managed as outlined below.

**Fund Establishment and Maintenance**

- The SRF was seeded by capturing 50% of the savings from 2009 energy retrofits at Shute Park Library and Parks Maintenance facilities. Additional funds brought the total to $51,000.
- Funds from other project savings are placed into the SRF on a City Fiscal Year during the budget process.

**Fund Growth**

- To grow the fund, project savings/avoided costs are calculated or estimated periodically, but no sooner than a reasonable amount of time after changes have been implemented.
- Savings/avoided costs are placed in the SRF according to the following schedule, which may be amended at any time based on program/fund review:
    - 50% of savings/avoided costs from established baseline after the first year
    - 25% of savings/avoided costs from established baseline after the second year
    - 25% of savings/avoided costs from established baseline after the third year
- Estimation of project savings/avoided costs should be based on reasonable, actual data, but may be estimated if necessary.

**Fund Cap**

The SRF is capped at $350,000 and will be monitored to ensure that the Fund balance does not exceed this amount.

**Fund Management**

The Fund balance is managed closely and reviewed as needed based on project proposals and the City's budget process. City management may provide the SRF with additional funds at any time.

## Sustainability Revolving Fund (SRF) Application

| | |
|---|---|
| Date Submitted: | Click or tap to enter a date. |
| Submitted by (name, title): | Click or tap here to enter text. |
| Project Title: | Click or tap here to enter text. |
| Project Size: | ☐ Small ($1 - $2,500)<br>☐ Medium ($2,501 - $10,000)<br>☐ Large ($10,001 - $25,000) |
| Total Project Cost: | $ _____ |
| Requested SFR Funding: | $ _____ |
| Additional Funding Needed: | $ _____ |
| Additional Funding Source(s): | Click or tap here to enter text. |

**Send completed application to : {Contact Information}**

**Project Summary:** Narrative summary of proposed project, including estimated timeline and time demand on City staff. Note specific coordination with department who will implement/install/lead the project. (500 words max)

**Baseline Data (provide for proposals over $5,000):**
Baseline data should include current resource use/intensity. For example, a lighting project should provide baseline electricity use. A fuel reduction project should describe the current fuel consumption (e.g., kWh, therms, gallons, etc.)

**Selection Criteria**

**Criterion 1 – Social Equity/Environmental Sustainability Return on Investment (ROI) (10 pts):** Describe how the project promotes activity that contributes to improved social equity and/or environmental health of City employees and our community in harmony with the natural environment? (500 words max)

**Criterion 2 – City Sustainability Goals (10 pts):** Describe how the proposed project addresses one or more of the City's sustainability goals. (See goals in the Appendix.) For example, how this project reduces the consumption of resources, emissions of toxins or other pollutants, including greenhouse gases, use of non-renewable fuel sources, etc. (750 words max)

**Criterion 3 – Financial Return on Investment (ROI) (10 pts):** If applicable, what is the estimated cost savings/avoidance (i.e., describe the cost and resource baseline and savings; estimate the timeline for payback of the investment, if applicable)? (250 words max)

**Criterion 4 – Leveraged Funds (10 pts):** Describe amount and source of any funds leveraged in proposal. (250 words max)

**Criterion 5 – Other Benefits (10 pts):** Describe other benefits the proposed project may provide (e.g., fulfills another goal or action, complements existing City sustainability project, provides positive public image for the City, increases efficiency in operations/services, supports community climate justice, etc.). (500 words max)

**Other Considerations**

Will the project create additional operations and maintenance (O&M) requirements? If so, please describe the needs, provide an estimate of time and/or cost requirements, and how they will be addressed.

**Sample:Appendix – Relevant City of Hillsboro & Hillsboro**

**2035 Goals City of Hillsboro 2030 Sustainability Goals**

1. 100% of City development investments meet a standard set for sustainable development, and City promotes and encourages sustainable development by others. To be developed in conjunction with affected stakeholders
2. 100% of applicable City policies incorporate the principles of sustainability
3. City's rate of material consumption meets internal standards for sustainability
4. 100% of all inputs purchased by the City are sourced from sustainable sources or meet internally established criteria (e.g., zero waste, zero toxins) where technologically and financially feasible
5. Energy Goals:
    - 2020 Goal: 20% reduced total City facility energy intensity
    - 60% reduced City facility energy consumption per square foot (2007 baseline)
    - 100% of electricity and natural gas sourced from renewable sources for City facilities and exterior lighting infrastructure
    - 80% production of energy for City facilities from renewable energy sources
    - 100% fossil fuel-free staff vehicles^ and 40% reduction for other exempt vehicles^ (non-passenger emergency response, etc.) (2007 baseline)

      ^Based on available technologies and cost effectiveness
6. 25% reduction in water consumption by City facilities against established baseline (including re-use and other measures) (2007 baseline)
7. Emissions Reduction Goals:
    - 80% reduction in greenhouse gas emissions (2007 baseline)
    - 100% of remaining emissions offset
    - Zero toxic emissions
8. Waste Reduction Goals:
    - 100% recycling of waste from City operations
    - Zero construction and maintenance waste (no waste from construction and maintenance activities is sent to landfill). May be accomplished via public/private partnerships
9. Sustainable Design and Construction Goals:

- All city facilities constructed or renovated shall meet current Leadership in Energy and Environmental Design (LEED) standards or better, unless cost prohibitive based on Return on Investment (ROI) or cost/benefit analysis
- All City facilities zero net energy consumption, if feasible based on Return on Investment (ROI) or cost/benefit analysis

10. Achieve a rate of construction material consumption that meets internal standards for sustainability (see standard as investigated and set by Policy working group)

**Hillsboro 2035 Community Environmental Stewardship Goals**

1. Energy and Mobility
   - Encourage and implement infrastructure enhancements to reduce energy use
   - Expand and enhance transit service to facilitate access for all
   - Enhance alternative transportation infrastructure

2. Material Recovery and Renewal
   - Improve material recovery and renewal infrastructure and processes
   - Expand material recovery and renewal education and action

3. Natural Resource Conservation
   - Expand natural resource conservation practices and infrastructure
   - Promote and facilitate productive and healthy food systems
   - Improve air quality and reduce carbon emissions

# Appendix C – Program Score Sheet

| Project Title | Department | Project Size Category | Criterion 1 | Criterion 2 | Criterion 3 | Criterion 4 | Criterion 5 | Total Pts |
|---|---|---|---|---|---|---|---|---|
| *Proposed Work Description* | *List Multiple With /* | *Refer to guide in C10 - 12* | *10 pts Max* | *10 pts Max* | *10 pts Max* | *10 pts Max* | *10 pts Max* | *Column E + F + G + H + I* |
| | | | | | | | | 0 |
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| | | | | | | | | 0 |

| | |
|---|---|
| *Small* | *$1,000,000 or less* |
| *Medium* | *$1,000,001 to $20,000,000* |
| *Large* | *$20,000,001 or more* |