

City of Richmond, CA

Green Revolving Fund Guiding Document

October 2017

Executive Summary

The purpose of the City of Richmond Green Revolving Fund is serve as an ongoing mechanism for investing in energy efficiency, water conservation and renewable energy projects. The city will use internal capital, as well as grants external grants to seed the revolving fund and make interest free internal loans to projects that reduce operating costs while saving energy and water as well as lowering carbon emissions. The GRF will be managed by the City of Richmond Green Revolving Fund Committee.

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About: A Green Revolving Fund (GRF) is an internal investment vehicle that provides financing to parties within an organization for implementing energy efficiency, renewable energy, and other sustainability projects that generate cost-savings. These savings are tracked and used to replenish the fund for the next round of green investments, thus establishing a sustainable funding cycle while cutting operating costs and reducing environmental impact.

A green revolving fund is an important tool for the City of Richmond to employ in its efforts to reduce energy use and reduce the city's carbon footprint.

Establishing a green revolving fund provides a compelling opportunity to attract external grants, because each grant would be used to reduce the city's operating budget and carbon/environmental footprint while allowing the funds to be used many times over as the savings from each project is returned to the GRF.

Fund Establishment: The City of Richmond Green Revolving Fund will be established once initial internal or external funding is secured. The fund will be managed by city's newly formed Green Revolving Fund Committee (described below).

Financial Structure: The fund will provide capital for high-performance building design, operations, energy efficiency and occupant behavior projects aimed at reducing the city's carbon/environmental footprint and operating budget.

Project feasibility (including energy savings, greenhouse gases reduced and return on investment) will be analyzed with the help of the utility companies and third-party energy engineers.

Financial savings generated by resource conservation projects will be returned to the City of Richmond Green Revolving Fund until the initial investment is paid off. After the payback period is complete 30 percent of the annual savings generated from each project will be returned to the fund for the remaining useful life of the project/equipment or until the fund reaches its \$1 million goal, whichever comes first. By tracking the projects in GRITS, a custom web platform for managing energy/financial/carbon data for green revolving fund projects, this process will be simplified. Additional capabilities were added to GRITS specifically to assist the City of Richmond in more fully benefitting from GRITS.

The Richmond GRF will be open to a wide range of projects from very small with a quick payback to larger projects with longer payback periods. While no formal limits will be set, the committee will generally concentrate on projects in the range of \$5,000 and \$300,000 with a payback of 10 years or less. The project selection criteria may evolve over time but the following criteria will be used to evaluate and prioritize projects under consideration:

- Payback period
- Resource conservation impact
- Carbon reduction potential
- Community educational opportunity
- Schedule overlap with connected larger capital projects

Funds for projects may be used for:

1. Materials or products that constitute the project – often the primary cost.
2. Professional work, installation, or design related to project implementation
3. Measurement and verification equipment – costs should be minimized except on projects that exceed \$100,000.

Typical projects will include:

- High efficiency lighting/networked lighting
- Lighting and HVAC occupancy sensors
- High efficiency HVAC
- Lighting and HVAC controls
- High efficiency kitchen equipment
- Insulation
- Renewable energy
- Metering
- Cogeneration
- Water-saving plumbing fixtures

In general, projects that do not exceed \$150,000 will use engineering data to estimate cost savings while larger projects may require installation of additional sub metering systems to fully capture actual energy savings project performance data. The GRF Committee will decide whether exact or estimated savings are appropriate for each project.

If necessary, modified savings repayment plans may be designed or approved either from the start or later in a project’s lifespan by consensus of the committee. For example, most GRF loans will be considered “full cost loans” meaning that the internal GRF loan will cover the entire cost of all materials, labor and anything else required to complete the project. In certain cases when Richmond is undertaking larger capital projects, the GRF Committee may choose to make an “incremental cost loan” whereby the GRF would provide the difference in capital required between standard technology being installed and higher performance technology that uses less energy or water. In this case, the GRF is only providing a small piece of the overall project cost which is specific to the upfront extra capital needed to invest in the higher efficiency technology. The savings paid back to the GRF would therefore be based on the

engineering data calculating how much energy/water is being saved compared to the standard technology.

In all cases, project proposals should take advantage of local, regional, or federal incentives/rebates for energy efficiency and renewable energy projects. When these incentives or rebates are received 100 percent of the funds should be deposited into the GRF account for use in the next round of projects.

Governance: The City of Richmond Green Revolving Fund Committee will meet quarterly to authorize implementation of individual projects, track progress, review the measurement and verification of projects completed to ensure that savings are adequately tracked and returned to the fund, and discuss proposed projects. The committee will be made up of the following representatives:

Chair:

Financial operations representative
Sustainability office representative
Facilities management representative
Community member representative

The committee will also be responsible for developing communication and educational materials about the fund itself and the projects funded as a means to provide education to the community. The committee may solicit energy and resource conservation ideas from the greater community for consideration at committee meetings. Eligible projects must reduce resource use (electricity, natural gas, water, renewable energy) and generate financial savings over its lifetime that exceeds the initial investment. Special consideration will be given to projects that also have an educational component.

The committee will generate a brief annual report outlining the impacts of the GRF during that period and since inception. This report can be very brief and generated in part through data from GRITS but should include a list of projects funded by the GRF. The committee may amend this guiding document at any time by consensus.