

# Potential Financial Strategies for a Madison Version of the Portland Clean Energy Fund

## A 350 Madison Report for the City of Madison's Sustainability Staff January 10, 2022

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### Introduction

In September 2021, Stacie Reece, City of Madison Sustainability Coordinator, and Susan Millar, lead for the Madison Community Working Group of 350 Madison's Community Climate Solutions Team, met to catch up on various topics. During this meeting, Stacie told me that a Portland Clean Energy Fund (PCEF) leader would be the featured presenter for 350 Madison's October Monthly Public Meeting. The primary goal of this Portland initiative is to fund projects that focus on reducing carbon emissions while assisting low-income families, focusing on engaging members of the city's BIPOC communities. Stacie praised this program and explained that she wants a program like this in Madison, but the tax funding strategy used to fund the Portland program (see description of the PCEF below) is illegal in Wisconsin. Then she said, **"I wish we knew of funding strategies that are legal in Wisconsin that we could use to launch a program like this."** Susan decided that Stacie's wish would be a good project for a student-based group to pursue.

During an early October meeting that helped launch this project, Stacie described the City's capital and operating budget structure, including its opportunities and limitations. She then encouraged Susan to identify financial strategies that fit within this budgetary framework. In particular, she encouraged us to consider a strategy whereby a third party operates, for example, a bond program, with the City possibly participating as the founding member based on financial contributions from the capital budget. When learning about existing third-party programs, she suggested we ask about, for example, the formal status of the third-party program (e.g., is it a non-profit), the terms of the bond program for founding members, types of membership, the capital generated, staffing, and so forth.

In addition to Susan, the people participating in this project were:

- Julia Jo Wilson, Lilly Scott, Maya Allen, and Haley Pitman, UW-Madison students seeking to participate in a 350 Madison project to fulfill the Community Learning Opportunity requirement for a senior-level social work course;
- Amy Palandech, a 350 Madison intern pursuing a sustainability management major at Bellevue University; and
- Liz Hachten, an emeritus history professor.

During fall 2021, this group collaboratively conducted web searches to identify various financial models that could be utilized for a potential Madison Clean Energy Fund. The group also conducted multiple interviews with financial experts, such as Erik Shambarger, the Sustainability

Director for the City of Milwaukee’s Environmental Collaboration Office, and David Schmiedicke, the City of Madison’s Finance Director. We also interviewed people who have successfully created funds using the economic models we have explored, such as Alelia Parenteau, Acting Sustainability & Resilience Co-Director of the City of Santa Barbara. Liz Hachten and Susan Millar wrote this report, with substantial help from Amy Palendech.

## **Summary of the Portland Clean Energy Program**

The Portland Clean Energy Fund (PCEF) was enacted by a citizen ballot measure in Portland, Oregon, in November 2018 to provide funding for projects within the community that benefit the climate while promoting racial and social justice. The PCEF is a municipal grant program financed by a one percent supplemental business license surcharge on large retail corporations that generate over one billion dollars a year in national revenue and \$500,000 in Portland sales. Revenue from basic needs such as groceries, medicine, and utilities are exempt, as are revenues generated by credit unions and cooperatives. The success of this fund has far exceeded expectations, raising over \$100 million since the measure passed. The fund is expected to see continued rapid growth with anticipated annual revenue of \$44 to \$61 million.

This initiative was made possible by the overwhelming support from Portland, with 65% percent of voters in favor. The success of this initiative fund is due to years of capacity-building partnerships between organizations of color and the philanthropic community. It is the first ballot measure in Oregon history to be led by BIPOC community leaders, including those in African American, Native American, Latinx, and Asian-Pacific Islander communities. The coalition that launched this initiative has grown to include over 200 organizations and individuals. At its core are organizations such as the Asian Pacific American Network of Oregon (APANO), the Coalition of Communities of Color, NAACP Portland Branch 1120, the Native American Youth & Family Center (NAYA), OPAL Environmental Justice Oregon, and Verde. Many of Portland's renowned environmental movement groups, such as 350PDX, the Audubon Society of Portland, Columbia Riverkeeper, Oregon Physicians for Social Responsibility, and the Oregon Chapter of the Sierra Club, also contribute to this initiative's success.

The City of Portland is working with a nine-person grant & oversight committee to implement the PCEF Grant Program, with the goal of funding clean energy community projects that benefit underserved members of the community.

Eligible recipients of the PCEF Grant Program are nonprofits, alone or in partnership with other nonprofit entities, government entities, or for-profit businesses. Moreover, at least 20% percent of all Fund grants must be awarded to nonprofits with a mission and track record of programs that benefit disadvantaged community members. Additionally, employees working on funded projects must earn no less than 180% of minimum wage. Forty to 60% of allocated funds are to be distributed to renewable energy and energy efficiency programs. Within this category, 50% of the grants will benefit low-income people and people of color. Twenty percent of funds will go to “green” job training, apprenticeships, and contractor programs that support economically disadvantaged and underrepresented workers. Additionally, 10% of grants will contribute to regenerative agriculture and green infrastructure and five percent towards future innovations. For more information on the PCEF, visit <https://www.portland.gov/bps/cleanenergy>.

## **Findings on Financial Strategies Feasible for a Local Clean Energy Fund (CEF)**

This section reviews financial strategies that could be used by the city or by the broader Madison community to obtain the seed money necessary to launch a CEF. At the end of the section, we discuss two additional financing mechanisms that might play a role in a Madison CEF, depending on the specific programs that the fund supports. A few reference resources are listed on the References page (flagged in parentheses in the text) or linked in the text. We acknowledge that readers may already know a great deal about these topics but nonetheless hope to cast new light by analyzing their potential for contributing to this climate justice-focused initiative.

### **Reallocation of Existing City Resources**

Our first suggestion is to consider allocating the cost savings from the City of Madison's municipal energy efficiency projects to support a CEF. The City of Madison is beginning to see significant declines in energy costs for municipal building operations as a result of recent investments in energy efficiency and solar power. According to the city's [online energy dashboard](#), the twelve-month period from November 2020 to October 2021 saw a 14% decline in overall municipal energy costs as compared to the previous 12 months - a savings of over \$400,000. At the present time, the city is not redirecting those savings to support other sustainability initiatives (David Schmiedcke interview, 11/19/21), even though strategic reinvestment of those energy savings would seem to be an effective means of advancing the city's Climate Forward plan priorities. Earmarking these annual energy savings (or some portion thereof) to support a CEF would provide an ongoing revenue stream at no additional cost to the taxpayers, while also raising public awareness of the significant scope and benefits of the city's investments in energy efficiency, conservation, and renewables.

### **Grant-based Financing**

Grant funding would be an excellent source of seed money to launch a CEF program. The city, perhaps in partnership with 350 Madison and/or other local non-profit organizations, could seek external grant funding from federal, state, and/or private sources (foundations, businesses) to support the launch of a CEF. For example, the recently enacted Infrastructure Investment and Jobs Act includes \$550 million for the Energy Efficiency and Conservation Block Grant program; 68% of those grants will go directly to cities and counties. The activities that are eligible for funding include several that might be part of a Madison CEF, such as establishing financial incentive programs for energy efficiency improvements and conducting energy audits for residential buildings. (A full list of eligible activities and other details of this program are available on the [National League of Cities website](#).)

There are challenges to enacting this approach. Writing grant proposals requires a significant up-front investment of time and energy, both of which may be in limited supply for city staff. (350 Madison may be able to help fill this gap since our volunteers include people with the requisite technical knowledge, grant-writing skills, and time to devote to such a project.) Another major challenge with grant funding is effectively leveraging this one-time infusion of money to create a longer-term impact – especially since funders often require evidence that any

new programs will be self-sustaining beyond the end of the grant period. One way to do this might be to use grant funds to create financing mechanisms that will outlast the grant period; two such strategies – revolving loan funds and loan loss reserve funds – are discussed at the end of this section. Another strategy would be to use grant money to create self-sustaining partnerships with nonprofits, educational institutions, private lending institutions, etc., with the goal of positioning the partners to be able to support the CEF after the grant period.

### **City Bond Financing**

Another possible strategy is to borrow the necessary funding, using one or more of the bonding instruments available to the city. This is a standard *municipal funding* mechanism that leverages private capital so that cities can make significant investments in infrastructure or services. This option involves more significant costs as well as being subject to the statutory debt limit imposed on Wisconsin cities. But, arguably, funding a CEF program is the kind of investment that can justify these costs. To do this, the city could redirect a portion of current general obligation borrowing to funding a CEF and/or issue project-specific instruments such as green bonds or community bonds.

But for this strategy to even be considered, the city would have to grapple with the debt limit barrier. Municipal borrowing in Wisconsin is a zero-sum game. So if we are correct in assuming that Madison is already borrowing the maximum allowed by state law, the city would have to shift resources from current projects to fund a CEF and find alternative funding mechanisms for these current projects. One possibility for shifting resources might be to make use of performance contracts to fund energy upgrades in some municipal buildings. The City of Milwaukee has made some use of performance contracts for such purposes; for example, they contracted with Johnson Controls to carry out a \$1 million energy upgrade of their Central Library. According to David Schmiedcke, performance contracts are a more costly option than using regular municipal borrowing, which is why Madison is not currently using them. But perhaps some strategic use of performance contracts might be warranted if it would free up borrowed money to be used for a CEF.

**Green Bonds.** Should the city decide to seed a CEF through debt financing, one option that may be technically feasible would be to issue use-of-proceeds green bonds. Increasingly popular with investors looking to decarbonize their portfolios, green bonds (also known as climate or climate-impact bonds) are used to fund projects that have a positive environmental or climate impact. There is no “official” definition of what qualifies as a suitable “green” project, although there are at least two recognized sets of standards. Any entity with legal bonding authority can issue green bonds, including municipalities, utilities, school districts, corporations, and public-private partnerships. Green bonds do not seem to have been widely adopted yet in Wisconsin, although the state did issue its first green revenue bonds in 2020 to support the Environmental Improvement Fund, and a number of Wisconsin utilities have issued green bonds to finance renewable energy projects. To date, no Wisconsin municipalities have issued green bonds. However, cities elsewhere have used these bonds – primarily to fund major infrastructure projects such as upgrading the wastewater management systems in the cities of Cleveland and St. Paul and expanding the regional transit system in Seattle.

There are distinct downsides for issuers of green bonds since the certification and offering process can be cumbersome, costly, and time-consuming; there are also ongoing verification and reporting requirements. While those drawbacks may be outweighed by the marketing advantages for many bond issuers, this may not be the case for Madison. David Schmiedecke is not a fan of the green bonds, pointing to the fact that Madison is able to raise sufficient funds on the regular municipal bond market, which has no problems raising money in the general municipal bond market. (Erik Shambarger from Milwaukee was also distinctly unenthusiastic about green bonds.)

**Community Bonds** are another type of special purpose bond that could be considered for CEF funding. Madison does have experience with this type of bonding. In 2018, the city issued general obligation promissory notes in the form of community bonds to support the expansion of facilities at Olbrich Gardens. Several features distinguished these community bonds from the general obligation bonds typically issued by the city:

- The target market for the bonds were residents of Madison; Dane County and Wisconsin residents were also prioritized.
- The bonds were available in relatively small denominations -minimum \$500 investment vs. the usual \$5000 minimum for municipal bonds.
- These bonds had a ten-year payback period rather than the 20-30 year term more typical of municipal bonds.

The underwriter for the bonds was Neighborly Securities, which has since gone out of business. The sale was held over just a one-week period in October 2018 and apparently fell short of expectations. They sold \$876,000 worth of bonds but had planned/hoped for \$2.1 million.

Despite the problems encountered by this particular effort to implement a community bond approach, it may be worth considering community bonds as a funding mechanism for a CEF. For one thing, 350 Madison and other local non-profit organizations could help promote the bonds. And the project could be a way to engage a broader cross-section of residents in this project and also be an opportunity for higher income residents to learn more about options for energy efficiency, etc. for their own homes.

### **Community-Based Financing Strategies**

The broader Madison community could also be mobilized to help raise the seed money for launching a CEF; such community-based financing mechanisms could supplement or even replace a possible financial contribution from the city's capital budget. For example, it is conceivable that a non-profit organization such as Sustain Dane might take the lead on organizing this project and raise money through grants and direct donations.

Carbon offset funds have also been used with some success in several locales to fund local energy efficiency and renewable energy investment. This strategy has the advantage of giving community members an opportunity to offset their own emissions while supporting their local communities to take climate action.

One example of this kind of community-based crowdfunding is the [Cleveland Climate Action Fund](#) (CCAF, originally titled Cleveland Carbon Fund), which was the first community-based,

open-access carbon reduction fund in the U.S. (Note that the CCAF appears to be defunct since the start of the pandemic.) It was founded by a consortium of local foundations and institutions, including the City of Cleveland; apparently, the Cleveland Foundation administered the program and collected the public donations that helped to support it. (It is not possible to judge from the website whether there were other additional sources of support for the fund.) The Cleveland Climate Action Fund offered small grants of \$500-\$5000 to resident-led, neighborhood-based projects that “met neighborhood needs while also meeting sustainability goals, including improved stormwater management, more clean energy, local food production, more walkable and bikeable neighborhoods, greater tree canopy, and more.” In 2015, for example, the CCAF awarded 13 grants totaling \$46,000 for projects that included “a neighborhood composting program on bicycles, transitioning a youth landscaping employment program to gasoline-free equipment, a solar array on a K-8 community school that integrates with STEM curriculum, a bicycle parking and repair station near a transit stop, and reforestation on vacant land.” It is also important to note that the CCAF invested in resources to build organizational capacity at the neighborhood level and prepare residents to apply for grants; this included the development of a detailed [Neighborhood Climate Action Toolkit](#).

Another community-based carbon offset fund is the Finger Lakes Climate Fund (FLCF) in upstate New York. This program allows residents of the Finger Lakes area to take responsibility for their CO<sub>2</sub> emissions by purchasing carbon offsets. The proceeds from these purchases help low-income families pay for energy efficiency measures. A local energy efficiency project reduces one ton of carbon dioxide emissions for every offset purchased. Donations to the Finger Lakes Climate Fund are used for grants to pay for energy efficiency programs in low to moderate-income households. The focus of this program is to fund local energy efficiency projects, which in turn helps boost the local economy, help local families in need, and support the environment. This program has successfully raised \$158,249 and has awarded 54 grants within the community.

The FLCF is a true carbon offset fund that includes features to ensure that donors’ money will “contribute to reducing carbon emissions through a local energy efficiency project that would not otherwise be possible. . . .” The FLCF website features a carbon calculator for the use of donors; the website also includes numerous case studies of funded projects, which show the precise carbon emission reduction associated with each project. The FLCF also requires that grantees use accredited contractors and the fund seeks third-party verification of the carbon reduction impact for each project.

The [Sustainable Tompkins](#) non-profit organization created the FLCF in 2010 with seed money provided by a local private foundation (the Park Foundation); it does not appear that local governments play any direct role in either funding or administering the fund. It should be noted that the scale of this fund is not huge– the website dashboard shows that FLCF has disbursed about \$160,000 for 54 projects. (The Cleveland Climate Action Fund website indicates that their fund had disbursed a total of \$174,000.) It would be interesting to know more about the factors that have supported or hindered the scope of activities and impact of the fund.

## Supplementary Financial Mechanisms

### *Revolving Loan Funds*

A Revolving Loan Fund (RLF) is a pool of capital from which loans can be made for projects; as loans are repaid, the money is then re-loaned for another project (USDOE). These loans require an initial investment to get the fund started. Once an RLF acquires this initial funding, it can accumulate the savings gained through projects it has funded to fund future projects. For example, if an RLF was used to fund a project to install solar panels on a facility, the utility bill savings realized could contribute to regrowing the fund.

There are two types of RLFs, internal and external.

- An external RLF is operated by a third party. They usually are government-sponsored and managed by departments such as the state energy office (energy.gov). An external fund is financed by ratepayer funds, treasury investments, and private capital. These funds typically offer lower interest rates and more flexible terms than available in commercial capital markets. Programs typically focus on financing the cost of efficiency upgrades such as appliances, heating and cooling, lighting, and insulation.
- An internal RLF benefits the same organization that maintains it. An internal fund is a more informal accounting treatment that effectively tracks and captures project savings (SJVCEO, 2019). Often, the seed money for this fund comes from within the organization, whether it be from general funds or annual operating budgets. These funds can also be derived from savings obtained from planned or in-progress projects in the form of utility incentives or programs, grants, or routine replacements of capital assets or high-efficiency operational equipment. Because the same capital is repurposed, as the fund grows, projects can be completed with little to no cost to the city, with all the project funds coming directly from the RLF. However, until the fund has reached this level of growth, alternative mechanisms are required to finance a project entirely.

Although RLFs have many advantages, they have disadvantages as well. Some projects have slow paybacks, so once money is taken from the fund to source a project, it may take some time to recoup the account. An RLF also entails administrative costs; management requires tracking all savings, as this is key to the success of this model. Additionally, “since RLFs provide access to a flexible source of affordable financing, operating costs may come to exceed operating income, resulting in erosion of the fund’s capital base. Annual inflation also contributes to capital base erosion. In either case, the fund may require additional public investment to remain functional” (CDFA). Luckily, many programs have overcome these hurdles and have successfully managed an RLF.

One example of a successful RLF is Santa Barbara’s Utilities Management Program. This program utilizes the internal RLF financial model within the city’s Facilities Division. This RLF is set up to manage and pay all General Fund city utility bills. This program allows for centralized management and analysis of over 650 City accounts (SJVCEO, 2019). The program received a one-time \$25,000 seed funding and a \$120,000 loan from the city council to be paid back in five years (City of Santa Barbara, 2017). Its continued funding comes from allocated costs modeled on a two-year rolling average of utility usage and incentive applications, project



development, and grant revenue. The project has successfully rolled over \$80,000 a year in just three years of operation, which funds projects that help meet the City's 100 percent renewable electricity by 2030 goal.

### ***Loan Loss Reserve Funds***

A [loan loss reserve fund](#) is a credit enhancement strategy that offers a way for governments to enhance and expand clean energy financing options that are available through the private sector. The fund guarantees against loan defaults, which should result in private lenders being able to reduce interest rates and/or credit requirements for clean energy loans. Thus, a loan loss reserve fund can be an effective strategy to leverage a relatively small amount of public money to enable a larger scale investment in decarbonization. For example, a one million dollar reserve fund with a 5% loss reserve could support up to \$20M in private lending. This was the approach taken by the City of Milwaukee in creating the Me2 energy-efficiency loan program in partnership with Summit Credit Union; federal grant money provided the seed money for the reserve fund. According to Erik Shambarger, this program has worked smoothly; the main problem has been generating demand for the loans.

Whether this strategy should be part of a financing package to support a Madison CEF would depend on several factors. First and foremost, it would be appropriate only if the CEF includes a targeted loan program. It would also require creating a strong partnership with private lending institutions that are willing to create attractive loan conditions. And, judging by the Milwaukee experience, it is crucial to consider how demand for the loans would be generated within the targeted communities.

## **Recommendations**

### **A. Centrality of a BIPOC-led Development Process**

In presenting recommendations, we return to the program that inspired this project - the Portland Clean Energy Program. As our summary of this program makes clear, the PCEF emerged from several years of capacity-building partnership work that was led by organizations of color and supported by both philanthropic community groups and the city. It was this evolving city-wide BIPOC-led partnership that came up with the funding strategy, and then successfully promoted it to the voters. We, therefore, recommend that the first step the City of Madison should take in order to launch a CEF is to **provide seed funding to support the development of a BIPOC-led partnership that is committed to establishing and administering a clean energy program that primarily benefits local front-line communities**. As was the case with Portland, this initial Madison-based partnership would be the natural source of the ideas and initiatives for how to fund the envisioned program. (We note that the Portland partnership had an easier route to financial funding than cities located in Wisconsin have!)

In short, this entire initiative would need to start with a partnership development process led by BIPOC communities and supported by the city and the community at large. It is imperative that whoever leads a Madison CEF must use a climate justice lens with every decision made. As Jessica Price (City of Madison Sustainability and Resilience Manager) explained during the



December 2021 350 Madison [public meeting](#), “Change moves at the speed of trust.” Our planet and those inhabiting it depend on leaders who understand and promote this approach.

## **B. Administration**

1. **It will be necessary to identify what type of organization this CEF would be.** As the findings above indicate, some financial strategies are administered by public entities, in particular, cities or states, while others are administered by non-profit organizations. That being said, administrative staff employed to oversee a Madison CEF should be provided by either city staff, members of a nonprofit organization, or a combination of both.
2. This organization would require leaders who are:
  - Inspiring and able to sustain vibrant participation by the founding and new BIPOC partners;
  - Able to identify and manage more than one financial strategy, and to shift financial strategies over time based upon lessons learned and emerging opportunities; and
  - Capable organizers, able to manage the processes of offering and awarding clean energy grants to community organizations, and monitoring and reporting the results of the grants awarded.

## **C. Financial Strategies**

Although some of the financial strategies described above would not likely work well, there are some that could launch and then sustain a Madison area CEF.

- **Strategies we are disinclined to recommend are Revolving Loan Funds (RLFs) and bonds.** Although RLFs have worked for some programs, in most cases, the payback period is too long once the money has been distributed to the fund’s initial projects. Sometimes the payback period takes so much time that the RLF is forgotten. Bonds are not ideal if they are dependent on a project’s earning capacity at a later time. If a project is unsuccessful, the program must find other resources to pay back the borrowed money. This can put too much strain on the program coordinators and the resources they depend on. The situation would be different, of course, if bond repayments were made by the city using funds generated from municipal energy efficiency and/or renewable energy projects.
- **Financial strategies that could work include both city and community-based financial models such as grants, crowd-funding or public-private partnerships.** However, the appropriate funding mechanisms also depend on the type organization a Madison Clean Energy Fund (CEF) is. For example, a city-funded loan loss reserve fund (with the initial money coming from a grant or community bond offering) would be appropriate if the CEF includes a low-cost loan program for BIPOC and lower-income communities. Yet, this would not be fitting if the CEF instead hands out incentive payments to those homeowners.

Whichever financial strategies a Madison CEF would use, there is no “silver bullet” like the one Portland has. A Madison CEF would require numerous revenue streams, and finding these resources will be a continuous process.

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