Financing The Future: How Green Revolving Funds Can Help You Pay For Energy Projects

By Max Storto

n 2012, the Deutsche Bank Climate Change Advisors and the Rockefeller Foundation published a research study finding that buildings consume 40 percent of the world's energy and are responsible for an equal percentage of global carbon emissions. The study states that current technologies can provide necessary relief to the American economy while simultaneously reducing energy consumption. If the U.S. invests \$279 billion in retrofits across the residential, commercial, and institutional markets, it can yield more than \$1 trillion of energy savings over 10 years, equivalent to 30 percent of the annual electricity consumption, and would create more than 3.3 million cumulative job years.

A BUSINESS CASE FOR INVESTING

Although economically advisable in the long term, energy-efficiency upgrades require significant upfront investments and are difficult to finance in our still-recovering economy. Green revolving funds (GRFs) help alleviate initial barriers to entry by providing a streamlined internal financing vehicle for energy-efficiency projects. GRFs supply funding to finance sustainability projects that generate cost savings; the savings are tracked and used to replenish the fund for future projects, establishing a self-sustaining financing mechanism that cuts operating costs and reduces an institution's carbon footprint.

GRFs benefit institutions in numerous ways when compared to one-time investments. They demonstrate the business case for sustainability, exhibit an institution's commitment to the environment, engage and educate the campus community, and leverage fundraising opportunities. Ultimately, revolving funds help institutionalize sustainability in an organization's culture by transforming expenses into investments and providing a perpetual funding source for costsaving initiatives.

GRF PRACTICES IN NORTH AMERICA

The Sustainable Endowments Institute (SEI) released the second **Greening the Bottom Line** report last fall, which ments, not expenses.

Green revolving funds all share the same general principles, but each institution must tailor certain components to ensure a successful implementation process. Finding seed capital, creating the correct accounting system, establishing payback mechanics and project selection criteria, and measuring savings will differ based on an institution's needs. It is essential to engage a diverse set of campus stakeholders to both build buy-in from multiple campus entities and also leverage the insights of experts on campus to create the best model. Furthermore, use existing research and case examples while generat-

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surveyed institutions of higher education throughout North America about GRF practices. The study found that 79 unique funds exist in 31 U.S. states and two Canadian provinces, representing \$110 million in cumulative committed capital. Within that group, institutions that provided ROI data indicated a median annual return on investment of 28 percent. The strong ROI helps explain the growing trend of GRF adoption in higher education, as the number of GRFs almost doubled from 2010-12, and also reframes the argument that energy-efficiency projects are investing administrative support for a fund.

The University of Minnesota's flagship campus in the Twin Cities established the Energy Conservation Internal Loan Program in 1998. The University created their \$4 million fund at a time when "the university prioritized a wide approach to sustainability and waste-abatement, which helped to bring the operational focus and administrative focus to their financing initiatives," says Amy Short, the campus sustainability director. The fund, which is run by the facilities management department and sustainability office, is part of an energy reduction strategy that has led to \$5.6 million of annual savings and has offset 50,000 tons of CO₂. The fund committee works with the finance staff to target projects with a five-year payback, and uses interest from students, faculty, and other constituents to drive their initiatives. Although projects are financed from multiple sources, Campus Sustainability Coordinator Shane Stennes states that the Loan Fund is "one important tool in our portfolio to reduce energy and resource consumption on campus and improve the efficiency of our facilities in our physical plant."

ESTABLISHING A GREEN REVOLVING FUND

Much of the legwork for establishing a green revolving fund has already been carried out. SEI has created an online Web tool to manage financial-, energy-, and carbon-data called the Green Revolving Investment Tracking System (GRITS). GRITS not only helps institutions overcome obstacles that arise from measuring and verifying complex energy- and cost-data by tracking project performance, but also allows schools to view project data from its peers. This project-sharing platform allows stakeholders to consider hundreds of extra data points when planning their own energy conservation measures.

Additionally, SEI released the **Introductory Guide to Implementation & Management** that outlines the ten primary steps to launch a GRF and discusses customizable fund parameters. SEI also published nine case studies and an investment primer that provides a good overview for GRF examples and answers many financial questions.

To coordinate efforts and encourage sharing of best practices, SEI launched an initiative called the **Billion Dollar Green Challenge**. The Challenge encourages institutions to allocate a cumulative one billion dollars in self-managed GRFs and take part in a national collective to engage in innovative sustainability financing practices. Participating institutions and organizations commit to sharing expertise and project information with peers. This initiative has catalyzed the recent GRF movement and helped foster a group that can collaborate to solve large-scale energy problems.

For more information on how your institution can take advantage of these transformative programs, be part of a growing movement, and contribute to the broader collective knowledge and communication on this important subject, contact

the Sustainable Endowments Institute at *info@endowmentinstitute.org*. (5)

Max Storto is senior research fellow & program coordinator at the Sustainable Endowments Institute, Cambridge, MA. He can be reached at *max@endowmentinstitute.org*. This is his first article for *Facilities Manager*.

