

## MUNICIPAL PARTNER

### CITY OF PITTSBURGH



#### **Implementation Model:**

#### **Green Initiatives Trust Fund**

##### **COMMUNITY SIZE**

Medium Urban, population 300,000

##### **GOAL**

To meet Pittsburgh's Climate Action Plan goal of reducing greenhouse gas emissions by 20% of 2003 levels by 2023

##### **APPROACH**

Pittsburgh established a Green Initiatives Trust Fund (GITF) through City Council legislation to set aside funds for energy conservation projects and to recycle project savings back into fund for further reinvestment

##### **INITIATIVE LAUNCHED**

2008



**Pittsburgh Climate Initiative**  
Working Together for a Sustainable Future

### Overview



The Green Trust Fund allows for a continuous pipeline of energy saving projects by providing the City with a secure and sustainable funding source to plan and implement future energy efficiency projects. The Fund also assures City Council that dollars are going to projects that save the City money and pay for themselves. As savings are realized from reduced rates from aggregated energy purchases, energy efficiency projects, and renewable energy generation, those funds are revolved back into the GITF for investment in additional projects.



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## Policies

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In 2008, the City of Pittsburgh created the Pittsburgh Climate Action Plan, Version 1.0, which recommended actions the municipal, community, business, and education sectors could take to help achieve the City's goal of reducing greenhouse gas emissions by 20% from 2003 levels by 2023. One of the recommendations of the Plan was to create a Sustainability Office within City government to be funded by the Mayor's Office.

In July 2008, the Pittsburgh City Council passed bill 2008-0540, which created a sustainable funding mechanism to implement Climate Action Plan recommendations by establishing the Green Initiative Trust Fund (GITF). The legislation also set conditions for the deposit and expenditure of the funds. Appropriated funds from the savings in annual operating budget as well as all grant funds awarded to the City for green initiatives were to be placed in the GITF. The stated purpose of the Fund was to promote energy conservation and efficiency including completing energy audits, making capital improvements to City-owned facilities, and implementing recommendations of the Climate Action Plan. In November 2009, the Pittsburgh City Council passed bill 2009-1908, which established the Sustainability Commission to oversee and advance the strategies of the Pittsburgh Climate Action Plan. As part of these responsibilities, the Commission reviews proposed projects to be funded with the GITF and provides recommendations to City Council for their approval.

Many of the recommended strategies were implemented and the City revisited and updated the plan in 2011. The Pittsburgh Climate Action Plan, Version 2.0, released in February 2012, builds on the first Plan by tracking the progress of the initial recommendations and proposing new measures to continue momentum toward the City's goals. The updated Plan follows a framework similar to its predecessor by organizing recommendations in the following sectors: government, business, community, and higher education.

### Tools:

- [Pittsburgh Climate Action Plan Version 1.0](#)
- [Pittsburgh Climate Action Plan Version 2.0](#)
- [Pittsburgh City Council Resolution 2008-0540 to Create the Green Initiative Trust Fund](#)
- [Pittsburgh City Council Resolution 2009-1908 to Create the Sustainability Commission](#)
- [Press Release: Mayor Creates Green Trust Fund](#)
- [Announcement Event Coverage](#)



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## Process

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Suggestions for potential projects to be funded by the GITF stem from recommendations of the Climate Action Plan and suggestions made by the Energy & Utilities Manager and other members of the Sustainability Commission.

While no formal rubric is used to evaluate projects, the City looks for projects that have a payback period of less than half of the operational life expectancy of the equipment or measure. The City has had no shortage of projects that meet this cost effectiveness test due to the older

age of the City's buildings and infrastructure. Potential projects are discussed at Sustainability Commission meetings, which occur as much as once a month and at least quarterly. The Sustainability Commission recommends projects for GITF funding to the City Council, which has the final vote on which projects move forward. Having a pre-identified funding source has allowed energy projects to move through the evaluation and approval process more quickly.



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## Tools and Resources

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The success of GITF is largely dependent on the varied funding mechanisms and streams that continue to build on the initial source of funding. The City seeded the GITF with an initial deposit of \$100,000. Additional deposits are made based on the energy cost savings compared to City-wide costs in the baseline year, 2007, as realized through reduced utility rates, audits of energy accounts, and energy efficiency projects.

In 2007, Pittsburgh's Energy & Utilities Department paid roughly \$8.5 million in energy bills for buildings, facilities, and infrastructure across all departments. Traditionally, any money left over from this operating budget at the end of the fiscal year was returned to the Finance Department. When the GITF was created, the utility budget was reduced to \$7.5 million, freeing up \$1 million in City general funds for other uses, and any money remaining in the utility budget at year end was rolled into the GITF. Unlike the City's operating budgets, the GITF account is allowed to accumulate over time. Since 2008, the City has found a variety of ways to shave energy bills below the \$7.5 million baseline including aggregated energy purchasing, auditing of utility accounts, and savings resulting from efficiency projects. Over time, as more and more projects generate ongoing savings, the GITF grows and is able to put more dollars to work for energy efficiency and sustainability goals.

- **Aggregated Energy Purchasing** – The City realized a large portion of their cost savings through participation in the Western Pennsylvania Energy Consortium, a region-wide energy cost and consumption reduction program founded in 2007. The Consortium aggregated the accounts of large energy purchasers including the City of Pittsburgh, Allegheny County, Pittsburgh Water & Sewer, The Sports and Exhibition Authority, Pittsburgh Zoo & Aquarium and other City authorities and local municipalities into one purchasing authority. This aggregation, offering a combined contracted volume of 200,000,000 kWh annually, was able to save Consortium members money by leveraging their pulled purchasing power to find the most competitive rate through a reverse auction. The Western Pennsylvania Energy Consortium reduced the City's utility budget by several hundred thousand dollars a year.
- **Utility Account Auditing and Negotiations** – The Energy and Utilities Department completed a thorough review of billed utility accounts and discovered that the City was being charged for streetlights no longer in operation and buildings the City no longer owned. The resolution of these incorrectly billed accounts reduced the City's overall energy bill and freed up funds for the GITF. In addition, Pittsburgh negotiated with their utilities for reduced rates on their unmetered exterior lighting accounts, which were charged by fixture not actual energy use. These reduced rates affected fixtures across technology classes, but most significantly reduced the rates for newly-replaced LED street and traffic lights based on their ability to reduce energy demand.
- **Savings Resulting from Energy Efficiency** – Pittsburgh has leveraged state and federal grants with the GITF to complete a portfolio of energy efficiency projects that have netted cost savings through reduced demand, allowing additional funds to be channeled into the

GITF. Funds applied toward projects include an \$800,000 grant from the Pennsylvania Department of Environmental Protection to replace traffic signals and streetlights with LED bulbs and \$3.4 million in ARRA Energy Efficiency and Conservation Block Grant funds to retrofit the City-County building. The GITF allowed Pittsburgh to pay the balance of the projects beyond what the grants would fund. In 2012 alone, Pittsburgh's efficiency projects are estimated to save roughly \$500,000, which will be added to the GITF.

**Tools:**

- [Presentation on the Western Pennsylvania Energy Consortium](#)




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## Measuring Success

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Pittsburgh's Climate Action Plan Version 2.0 provided an opportunity for the City to report on progress made on Version 1.0's recommendations. Version 2.0 addressed each of the recommended measures the previous version offered throughout four sectors - government, business, community, and higher education. Updates included status reports (complete, in progress, or not yet addressed) and details of the measures taken.




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## Outcomes

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As of November, 2012 the GITF has funded the following projects:

Project List	Total Project Cost	GITF Cost	Annual Savings Estimates	Other Funding Source
Five solar thermal installations	\$100,000	\$100,000	\$23,000	
6KW photovoltaic installation	\$25,000	\$25,000	\$5,000	
Installation of 4,000 LED streetlights	\$2,500,000	\$1,700,000	\$80,000 in energy costs and \$100,000 in maintenance	\$800,000 from state grant
City-County building retrofit	\$3,750,000	\$350,000	\$250,000	\$3,400,000 from ARRA funds
Retrofit of various City facilities	\$200,000	\$200,000	\$20,000	
Miscellaneous programs	\$75,000	\$75,000	\$6,000	

### Green Trust Fund Yearly Deposits

<b>FY Year</b>	<b>City Energy Expenses</b>	<b>GITF Deposit Amount</b>	<b>Source</b>
2008	\$7,500,000	\$100,000	Initial seed funds
2009	\$7,225,000	\$275,000	Savings from aggregated purchases and audited accounts
2010	\$7,225,000	\$275,000	Savings from aggregated purchases and audited accounts
2011	\$6,550,000	\$950,000	Above + savings from exterior LED replacements and other negotiated rate reductions
2012 est.	\$6,400,000	\$1,100,000	Above + savings from City-County building