US EPA ARCHIVE DOCUMENT

Clean Energy Financing Programs

Decision Resources for States and Communities

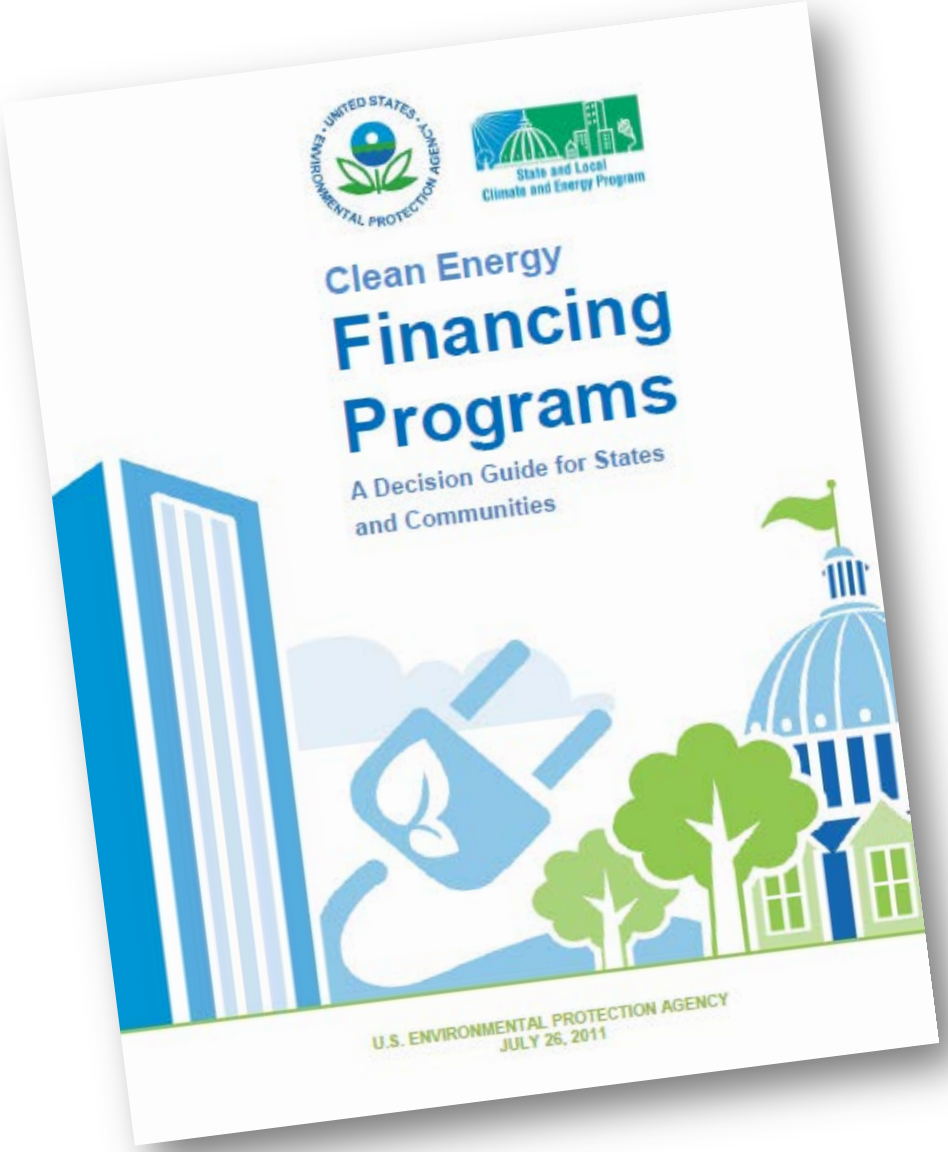
Wednesday, June 13, 2012

Niko Dietsch

U.S. Environmental Protection Agency

State Clean Energy and Climate Program

Available as a PDF...

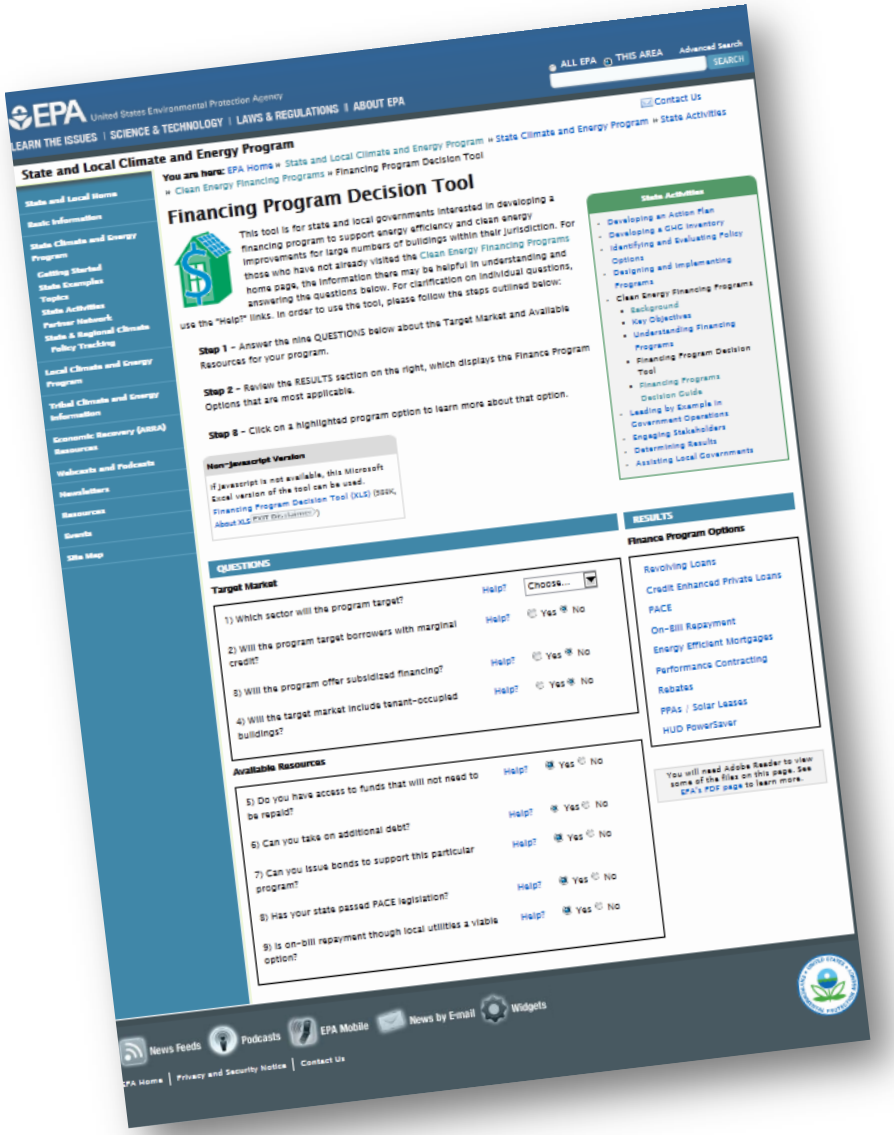


57 pages with all the details

- Important Objectives
- Keys to Success
- Key Elements
- Financing Program Options
- Financing Tools and Resources

www.epa.gov/statelocalclimate/documents/pdf/FinancingProgramsResourceGuide.pdf

...and Online



A Quick Overview Plus the Interactive Decision Tool

The Decision Tool is a useful starting point for state and local governments wanting to zero in quickly on a financing program that is likely to suit their needs. The Tool does not replace the need for expert advice when choosing and implementing a financing program.

http://www.epa.gov/statelocalclimate/state/activities/financing.html

The Decision Tool: a Guided Tour

Local Climate and Energy Program

QUESTIONS

Target Market

1) Which sector will the program target?	Help?	Choose...
2) Will the program target borrowers with marginal credit?	Help?	○ Yes ◉ No
3) Will the program offer subsidized financing?	Help?	○ Yes ◉ No
4) Will the target market include tenant-occupied buildings?	Help?	○ Yes ◉ No

Available Resources

5) Do you have access to funds that will not need to be repaid?	Help?	◉ Yes ○ No
6) Can you take on additional debt?	Help?	◉ Yes ○ No
7) Can you issue bonds to support this particular program?	Help?	◉ Yes ○ No
8) Has your state passed PACE legislation?	Help?	◉ Yes ○ No
9) Is on-bill repayment though local utilities a viable option?	Help?	◉ Yes ○ No

RESULTS

Finance Program Options

- Revolving Loans
- Credit Enhanced Private Loans
- PACE
- On-Bill Repayment
- Energy Efficient Mortgages
- Performance Contracting
- Rebates
- PPAs / Solar Leases
- HUD PowerSaver

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Our Scenario

- You are the Sustainability Manager for a mid-size city with a population of 200,000
- Climate and clean energy issues is a new area for your City Council
- No obvious sources of additional funding, and no clear choice of programs
- You propose a clean energy project involving a public building
- That is as far as you've gotten….

1. Which sector will the program target?

Local Climate and Energy Program

QUESTIONS

Target Market

1) Which sector will the program target? Help? Choose...
   - Choose...
   - Commercial
   - Residential
   - Public
   - Non-Profit

2) Will the program target borrowers with marginal credit? Help?

3) Will the program offer subsidized financing? Help? ○ Yes ◉ No

4) Will the target market include tenant-occupied buildings? Help? ○ Yes ◉ No

Available Resources

5) Do you have access to funds that will not need to be repaid? Help? ◉ Yes ○ No

6) Can you take on additional debt? Help? ◉ Yes ○ No

7) Can you issue bonds to support this particular program? Help? ◉ Yes ○ No

8) Has your state passed PACE legislation? Help? ◉ Yes ○ No

9) Is on-bill repayment though local utilities a viable option? Help? ◉ Yes ○ No

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2. Will the program target borrowers with marginal credit?

Local Climate and Energy Program

QUESTIONS

Target Market

1) Which sector will the program target?	Help?	Public
2) Will the program target borrowers with marginal credit?	Help?	Yes No
3) Will the program offer subsidized financing?	Help?	Yes No
4) Will the target market include tenant-occupied buildings?	Help?	Yes No

Available Resources

5) Do you have access to funds that will not need to be repaid?	Help?	Yes No
6) Can you take on additional debt?	Help?	Yes No
7) Can you issue bonds to support this particular program?	Help?	Yes No
8) Has your state passed PACE legislation?	Help?	Yes No
9) Is on-bill repayment though local utilities a viable option?	Help?	Yes No

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3. Will the program offer subsidized financing?

Local Climate and Energy Program

QUESTIONS

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4. Will the target market include tenant-occupied buildings?

Local Climate and Energy Program

QUESTIONS

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5. Do you have access to funds that will not need to be repaid?

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Click on “Help?” at any time...

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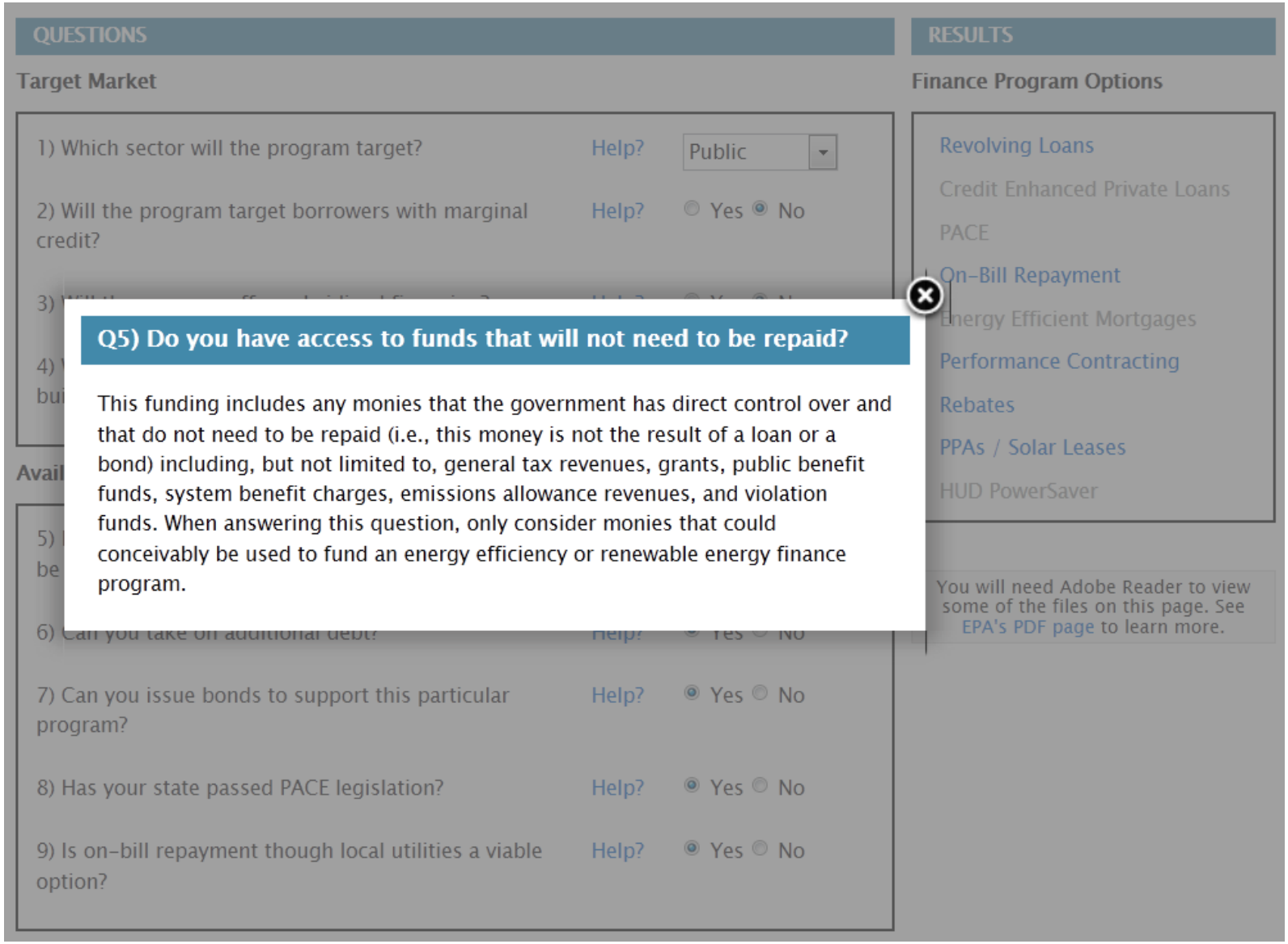

5. Do you have access to funds that will not need to be repaid?

Local Climate and Energy Program

QUESTIONS

Target Market

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7) Can you issue bonds to support this particular program?	Help?	Yes No
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6. Can you take on additional debt?

Local Climate and Energy Program

QUESTIONS

Target Market

1) Which sector will the program target?	Help?	Public
2) Will the program target borrowers with marginal credit?	Help?	Yes ○ No ◉
3) Will the program offer subsidized financing?	Help?	Yes ○ No ◉
4) Will the target market include tenant-occupied buildings?	Help?	Yes ○ No ◉

Available Resources

5) Do you have access to funds that will not need to be repaid?	Help?	Yes ◉ No ○
6) Can you take on additional debt?	Help?	Yes ○ No ◉
7) Can you issue bonds to support this particular program?	Help?	Yes ◉ No ○
8) Has your state passed PACE legislation?	Help?	Yes ◉ No ○
9) Is on-bill repayment though local utilities a viable option?	Help?	Yes ◉ No ○

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7. Can you issue bonds to support this particular program?

Local Climate and Energy Program

QUESTIONS

Target Market

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2) Will the program target borrowers with marginal credit?	Help?	○ Yes ◉ No
3) Will the program offer subsidized financing?	Help?	○ Yes ◉ No
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Available Resources

5) Do you have access to funds that will not need to be repaid?	Help?	◉ Yes ○ No
6) Can you take on additional debt?	Help?	○ Yes ◉ No
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8) Has your state passed PACE legislation?	Help?	◉ Yes ○ No
9) Is on-bill repayment though local utilities a viable option?	Help?	◉ Yes ○ No

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8. Has your state passed PACE legislation?

Local Climate and Energy Program

QUESTIONS

Target Market

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2) Will the program target borrowers with marginal credit?	Help?	Yes ◉ No
3) Will the program offer subsidized financing?	Help?	Yes ◉ No
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Available Resources

5) Do you have access to funds that will not need to be repaid?	Help?	◉ Yes No
6) Can you take on additional debt?	Help?	Yes ◉ No
7) Can you issue bonds to support this particular program?	Help?	Yes ◉ No
8) Has your state passed PACE legislation?	Help?	◉ Yes No
9) Is on-bill repayment though local utilities a viable option?	Help?	◉ Yes No

RESULTS

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http://pacenow.org

9. Is on-bill repayment through local utilities a viable option?

Local Climate and Energy Program

QUESTIONS

Target Market

1) Which sector will the program target?	Help?	Public
2) Will the program target borrowers with marginal credit?	Help?	○ Yes ◉ No
3) Will the program offer subsidized financing?	Help?	○ Yes ◉ No
4) Will the target market include tenant-occupied buildings?	Help?	○ Yes ◉ No

Available Resources

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Four Financing Program Options might be suitable in this situation

Local Climate and Energy Program

QUESTIONS

Target Market

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4) Will the target market include tenant-occupied buildings?	Help?	○ Yes ◉ No

Available Resources

5) Do you have access to funds that will not need to be repaid?	Help?	◉ Yes ○ No
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7) Can you issue bonds to support this particular program?	Help?	○ Yes ◉ No
8) Has your state passed PACE legislation?	Help?	◉ Yes ○ No
9) Is on-bill repayment though local utilities a viable option?	Help?	○ Yes ◉ No

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Click on an Option...

Local Climate and Energy Program

QUESTIONS

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9) Is on-bill repayment though local utilities a viable option?	Help?	○ Yes ◉ No

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...to see a brief summary.

Local Climate and Energy Program

QUESTIONS

RESULTS

Target Market

Finance Program Options

Performance Contracting

Energy Savings Performance Contracting (ESPC) is a wide-ranging building retrofit option developed in the private sector. ESPCs are typically performed by an Energy Services Company (ESCO) and include a comprehensive building energy audit, a financial analysis of upgrade options, arrangement of project financing, installation of building upgrades, and post-installation performance monitoring and equipment maintenance.

ESPCs are typically designed to be cash-flow positive or neutral, where the amount of monthly energy savings are at least equal to the amount of the monthly payment needed to finance the improvements. Most ESCOs guarantee the projected energy savings, and will reimburse the customer if the savings are not realized.

ESPCs do not require public subsidies to operate successfully. However, a state or local government can encourage interest in ESPCs by offering rebates or subsidized financing, which may require public-sector funds. Governments with the ability to issue bonds at attractive rates can also aggregate and help raise capital for many smaller projects, passing along the lower interest rate from the large bond issuance to the smaller projects, particularly if the projects will be installed around the same time and have similar payback periods.

Performance Contracting Characteristics

Technology Focus	Energy Efficiency and Renewable Energy (Limited)
Type of Measures Financed	Whole-Building Upgrades
Target Sector(s)	Public, Non-Profit, and Commercial & Industrial

Private Loans

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Mortgages

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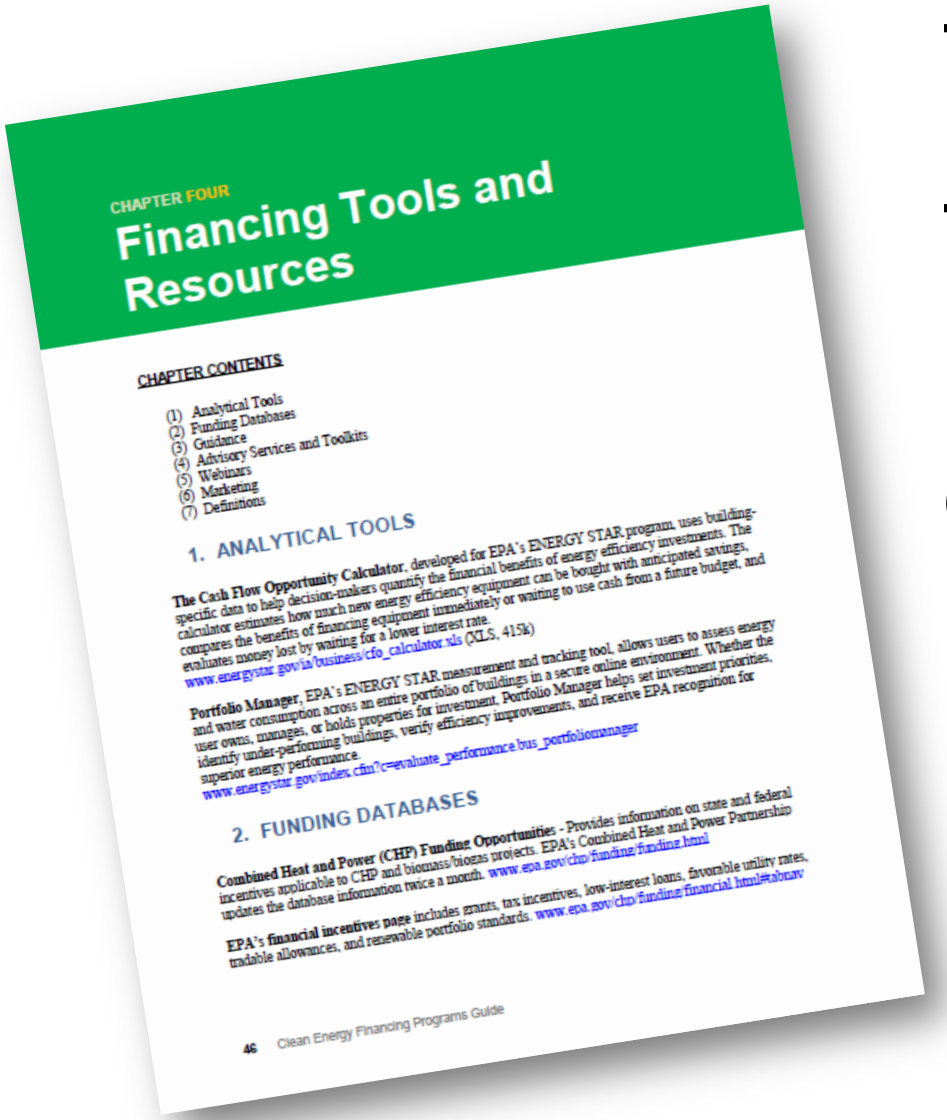
9) Is on-bill repayment though local utilities a viable option? Help? Yes No

A Final Note...



CHAPTER FOUR

Financing Tools and Resources

CHAPTER CONTENTS

(1) Analytical Tools
(2) Funding Databases
(3) Guidance
(4) Advisory Services and Toolkits
(5) Webinars
(6) Marketing
(7) Definitions

1. ANALYTICAL TOOLS

The Cash Flow Opportunity Calculator, developed for EPA's ENERGY STAR program, uses building-specific data to help decision-makers quantify the financial benefits of energy efficiency investments. The calculator estimates how much new energy efficiency equipment can be bought with anticipated savings, compares the benefits of financing equipment immediately or waiting to use cash from a future budget, and evaluates money lost by waiting for a lower interest rate.
www.energystar.gov/ia/business/cfo_calculator.xls (XLS, 415k)

Portfolio Manager, EPA's ENERGY STAR measurement and tracking tool, allows users to assess energy and water consumption across an entire portfolio of buildings in a secure online environment. Whether the user owns, manages, or holds properties for investment, Portfolio Manager helps set investment priorities, identify under-performing buildings, verify efficiency improvements, and receive EPA recognition for superior energy performance.
www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager

2. FUNDING DATABASES

Combined Heat and Power (CHP) Funding Opportunities - Provides information on state and federal incentives applicable to CHP and biomass/biogas projects. EPA's Combined Heat and Power Partnership updates the database information twice a month. www.epa.gov/chp/funding/funding.html

EPA's financial incentives page includes grants, tax incentives, low-interest loans, favorable utility rates, tradable allowances, and renewable portfolio standards. www.epa.gov/chp/funding/financial.html#tabnav

46 Clean Energy Financing Programs Guide

The Decision Guide includes six pages of Tools and Resources, including links and brief descriptions

Contact Information

Niko Dietsch

U.S. Environmental Protection Agency

State Clean Energy and Climate Program

(202) 343-9299

dietsch.nikolaas@epa.gov