

# Federal Funding Opportunities for Wastewater Plants in FY10

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November 4, 2009

## Benchmark Your Plant!

- Consultants-benchmark EVERY ww plant
- Need help? Free classes, on-site help, phone help, email help, FAQs...no excuses!
- Goal: benchmark **EVERY** WWTP in New England
- [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark)
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## ENERGY STAR Cash Flow Optimization Tool

- Simple excel spreadsheet, free download (google: energy star cfo calculator)
- Calculates the cost/benefits of waiting for capital vs. borrowing
- Provides outputs that CFOs and non-engineering managers can understand
- New version to be released shortly adapted specifically for water/ww industry
- Contact: Katy Hatcher, ENERGY STAR National Manager, Public Sector [hatcher.caterina@epa.gov](mailto:hatcher.caterina@epa.gov), 202 343-9676

## State Revolving Funds (SRF)

- 20% minimum green reserve remains
  - States may use more than 20% to fund green
  - Green infrastructure
  - Water or **energy** efficiency improvements
  - Other environmentally innovative activities
- No more Buy American Act
- Davis-Bacon Prevailing Wage Act remains for 2010
  - Funds may be used to hire a manager to deal with this portion

## SRF Specifics

No breakdown by state/region yet

Clean Water SRF: **\$2.1 billion**

- 200% increase from 2009 (\$689 million)
- ~\$330 million in subsidies (30% over first billion)

Drinking Water SRF: **\$1.38 billion**

- 64% increase from 2009 (\$840 million)
- ~\$414 million in subsidies (30% of total)

## USDA Rural Utilities Service

- Water and Environment Program will have >\$2 Billion in FY10 as grants and loans
- Expect to be able to fund all eligible projects that come through actively seeking projects
- Only for rural communities with population less than 10,000
- Average loan:grant ratio ~ 70:30, varies depending on poverty rates from 0:100 to 100:0
- Loan rates vary from 2% - 4.25% depending on poverty rates
- Rolling deadlines
- No set match-based on ability to pay

## USDA RUS contacts

- MA/CT/RI: Daniel Beaudette, (413) 253-4318  
[Dan.Beaudette@ma.usda.gov](mailto:Dan.Beaudette@ma.usda.gov)
- Maine: Ronald C. Lambert, Jr., (207) 990-9124  
[ronald.lambert@me.usda.gov](mailto:ronald.lambert@me.usda.gov)
- NH/VT: Rhonda Shippee, (802) 828-6030  
[rhonda.shippee@vt.usda.gov](mailto:rhonda.shippee@vt.usda.gov)
- NY: David A. Miller, (315) 477-6427,  
[david.miller@ny.usda.gov](mailto:david.miller@ny.usda.gov)

## Department of Commerce Economic Development Agency

- EDA Mission: Jobs! Jobs!! JOBS!!!
- Provides 50-80% grants with local match, grant categories include infrastructure/public works
- Local match can be SRF or USDA \$
- Amount of match depends on level of economic distress in community
- Preference is for “economic adjustments,” i.e., entrepreneurship, incubators, or projects that will create many permanent, stable, highly-paid jobs
- Work in partnership with Regional Planning Authorities or similar
- Applications accepted on rolling basis

## EDA Global Climate Change Mitigation Incentive Fund (GCCMIF: clumsiest acronym award?)

- Must focus on at least one area here:
  - Renewable Energy
  - Energy Efficiency
  - Reuse/Recycling/Restoration
  - Green Building (LEED or similar)
- And have at least one of these outputs:
  - Development and/or manufacture of green end-product
  - Greening of an existing function or process
  - Creation or renovation of a green building
- Same job and private capital investment outcomes as traditional EDA grants

## Public Works EDA Grants in 2008 and Contact Info

- Maine: 1 grant, \$750,000
- Mass: 4 grants, \$4.5 million total
- No other grants in New England
- NY: 3 grants, \$5.2 million total
- Average construction grant range from \$700k - \$3 million
- FY08: \$146 million in PW grants and \$9.4 million GCCMIF
- Contacts:
  - NY & VT: John Marshall (315) 448-0938, [HMarshal@eda.doc.gov](mailto:HMarshal@eda.doc.gov)
  - ME & NH: Alan Brigham, (207) 347-3139, [ABrigham@eda.doc.gov](mailto:ABrigham@eda.doc.gov)
  - RI: Marguerite McGinley, (215) 597-8822, [MMcGinley@eda.doc.gov](mailto:MMcGinley@eda.doc.gov)
  - CT: Jarrett Jackson, (215) 597-1074, [JJackson@eda.doc.gov](mailto:JJackson@eda.doc.gov)
  - MA: Matt Suchodolski, (215) 597-1242, [MSuchodolski@eda.doc.gov](mailto:MSuchodolski@eda.doc.gov)

## DOE Grants

- No water/wastewater specific funds
- DOE is program driven—find ways to make your project fit their programs.
  - Example: currently funding technical assistance for large solar projects (thermal, pv, hot water, or concentrating) in large, replicable installations. Could solar thermal work for sludge processing?
- Funding is more often for pilots, science and research projects, not implementation
- Most DOE funding is for loan guarantees and tax incentives —difficult for wastewater industry to access
- Technical assistance for state and local officials may be available through Technical Assistance Project (TAP)

## DOE Recovery Act Programs

\$16.8 billion designated for Energy Efficiency and Renewable Energy

<http://www.eere.energy.gov/recovery/>

- \$5 billion for the [Weatherization Assistance Program](#)
- \$3.1 billion for the [State Energy Program](#)
- \$3.2 billion for [Energy Efficiency and Conservation Block Grants](#)
  - \$454 Million for [retrofit ramp-ups in energy efficiency](#)
- \$2 billion for [Advanced Battery Manufacturing Grants](#)
- \$400 million for [Transportation Electrification](#)
- \$300 million for an [Energy Efficient Appliance Rebate Program and ENERGY STAR®](#)
- \$300 million for an [Alternative-Fueled-Vehicles Pilot Grant Program](#)

## DOE Recovery Act Programs (con'd)

\$16.8 billion designated for Energy Efficiency and Renewable Energy

<http://www.eere.energy.gov/recovery/>

- \$2.5 billion for Applied Research, Development, Demonstration, & Deployment, including:
  - \$800 million for the [Biomass Program](#)
  - \$400 million for the [Geothermal Technologies Program](#)
    - \$350 million for the [demonstration and research and development of geothermal energy](#)
    - \$50 million for [geothermal heat pumps](#)
  - \$346 million for [energy efficient building technologies](#)
  - \$256 million for the [Industrial Technologies Program](#)
  - \$117 million for the [Solar Technologies Program](#)
  - \$110 million for the [Vehicle Technologies Program](#)
  - \$100 million for [facility and infrastructure improvements at the National Renewable Energy Laboratory](#)
  - \$93 million to [support wind energy projects](#)
  - \$50 million for [Information and Communications technology](#)
  - \$41.9 million to [spur the growth of Fuel Cell Markets](#)
  - \$32 million for [modernizing existing U.S. hydropower infrastructure, increasing efficiency, and reducing environmental impact](#)
  - \$25 million for the Massachusetts [Wind Technology Testing Center](#)
  - \$22 million for [Community Renewable Energy Deployment](#)

## Thank you. Questions?

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## Regional and State Programs (RGGI)

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November 4, 2009

### Regional GHG Initiative (RGGI)

[www.rggi.org](http://www.rggi.org)

- First mandatory GHG cap-and-trade program in U.S.
- Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont
- All state programs regulated based on the “Model Rule,” for consistency

## Offsets

- Can be used by regulated, capped electric power generation facilities to satisfy a limited portion of compliance obligation (initially 3.3%, could expand to 5% or 10% if CO<sub>2</sub> allowance prices exceed certain thresholds)
- Represent CO<sub>2</sub>-equivalent emissions reductions or carbon sequestration that is real, additional, verifiable, enforceable, and permanent.
- All offset projects must be located within one of the RGGI participating states.
- Each ton of CO<sub>2</sub>e has a serial number
- Provide compliance flexibility for electric power facilities

## Offsets

### **5 categories agreed to by all participating states**

- Landfill methane capture and destruction
- Reduction in emissions of sulfur hexafluoride (SF<sub>6</sub>) in the electric power sector
- Sequestration of carbon due to afforestation
- *Possibly applicable to WWTFs:* Reduction or avoidance of CO<sub>2</sub> emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency in the building sector reduce on-site combustion of natural gas, oil, or propane in existing or new replacement of zero-net-energy buildings
- Avoided methane emissions from agricultural manure management operations

## Strict “EE” Offset Criteria

- Improvements in the energy efficiency of combustion equipment that provide space heating and hot water, including a reduction in fossil fuel consumption through the use of solar and geothermal energy.
- Improvements in the efficiency of heating distribution systems.
- Installation or improvement of energy mgmt. systems.
- Measures that improve the thermal performance of the building envelope.
- Fuel switching to a less carbon-intensive fuel for use in combustion systems, including the use of liquid or gaseous eligible biomass; conversions to electricity are not eligible.
- Multiple prescriptive energy efficiency standards, best-practice design and installation practices, or market penetration rate standards may apply to a project depending on the specific ECMs implemented and the date of project commencement. Consult state regulations for details.

## Offset Timing & Verification

### Example – New Hampshire

- Must be after December 20, 2005
- Awarded for initial 10-year period; one renewal possible after that; no credit after 20 years.
- Must report/document annually on CO<sub>2</sub> reductions
- Energy efficiency offset project:
  - Before January 1, 2009: reports due by Dec 31, 2009 (too late!)
  - After January 1, 2009: energy conservation measures must have market penetration rate of less than 5%; monitoring & verification reports for such projects is due within 6 months of the end of the year in which offsets are requested.
- Verification required; verifiers are certified.

## Offsets Program in Action

- Only 2 projects (non-WWTF) regionwide – in application stage (no offsets issued to date)
- no WWTF projects
- Allowance prices are so low, offset projects currently do not appear to be economically feasible

## Allowances & Resulting State Funding Programs

### Auction Results

#### Results by Auction

This chart displays clearing prices, allowances sold and proceeds yielded across all ten states in each RGGI CO<sub>2</sub> Allowance Auction held to date. To view additional information about each auction, including allowances sold and proceeds yielded by each state, click on the auction number listed in the left-hand column.

Auction Number	Allocation Year	Quantity Offered	Quantity Sold	Clearing Price	Total Proceeds
<a href="#">Auction 1**</a> 9/25/2008	2009	12,565,387	12,565,387	\$3.07	\$38,575,738.09
<a href="#">Auction 2</a> 12/17/2008	2009	31,505,898	31,505,898	\$3.38	\$106,489,935.24
<a href="#">Auction 3</a> 3/18/2009	2009	31,513,765	31,505,898	\$3.51	\$117,248,629.80
	2012	2,175,513	2,175,513	\$3.05	
<a href="#">Auction 4</a> 6/17/2009	2009	30,887,620	30,887,620	\$3.23	\$104,242,445.00
	2012	2,172,540	2,172,540	\$2.06	
<a href="#">Auction 5</a> 9/9/2009	2009	28,408,945	28,408,945	\$2.19	\$66,278,239.35
	2012	2,172,540	2,172,540	\$1.87	

## State Funding Program Funds

### Cumulative Results by State

This chart displays allowances sold and proceeds yielded by each of the Participating States across all RGGI CO<sub>2</sub> Allowance Auctions held to date. To view more detailed information, including allowances sold and proceeds yielded in each auction for a given state, click on the state name listed in the left-hand column.

State	2009 Allowances Auctioned to Date	2012 Allowances Auctioned to Date	Total Proceeds (All Auctions)
<a href="#">Connecticut</a>	7,237,648	360,957	\$22,770,582.60
<a href="#">Delaware</a>	3,047,505	200,094	\$9,841,870.12
<a href="#">Maine</a>	4,230,870	190,365	\$13,507,410.05
<a href="#">Maryland</a>	26,658,909	1,199,652	\$84,793,994.54
<a href="#">Massachusetts</a>	21,897,670	985,695	\$69,650,856.62
<a href="#">New Hampshire</a>	4,758,441	260,550	\$15,250,315.61
<a href="#">New Jersey</a>	15,277,369	849,894	\$51,526,159.70
<a href="#">New York</a>	48,568,020	2,329,155	\$155,299,078.17
<a href="#">Rhode Island</a>	2,193,873	98,724	\$6,978,050.89
<a href="#">Vermont</a>	1,011,310	45,507	\$3,216,669.18
<b>Total</b>	<b>134,881,615</b>	<b>6,520,593</b>	<b>\$432,834,987.48</b>

## Funding from Allowance Sale Proceeds

- Best potential source of funds for WWTFs
- Mostly focused on energy efficiency work
- Somewhat flexible – investigate your options, be creative
- Talk to state Departments of Energy Resources

That's all for now...

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