Drinking Water & Wastewater Facilities Technical & Financial Assistance for Municipalities

Energy-Saving Opportunities

Drinking water and wastewater treatment facilities are excellent candidates for energy efficiency measures and “green” renewable power development, due to their high energy usage and potential for significant savings.

Installing updated energy efficient equipment, such as pumps and motors, treatment process improvements, lighting, HVAC, and energy management systems for ratepayers can significantly reduce operating costs.

“Green” renewable energy such as solar photovoltaic, solar thermal, anaerobic digestion, wind, in-line hydropower and geothermal heat pumps can provide a steady and reliable source of on-site power to water and wastewater systems.

Leverage All Available Financial Incentives

To help implement your energy efficiency and renewable energy projects, financial incentives are available through Mass Save®, an initiative sponsored by Massachusetts’ gas and electric utilities, energy efficiency service providers, and in partnership with the Commonwealth, which offers financing and technical assistance to help assess, purchase and install energy efficient equipment and systems. http://www.masssave.com

The Database of State Incentives (DSIRE) is a comprehensive source of information on state, local, utility and federal incentives and policies that promote renewable energy and energy efficiency development. http://www.dsireusa.org.

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Leveraging all available financial incentives together can make your energy upgrade projects more cost-effective. Many energy efficiency retrofit projects (funded through financial incentives provided by energy utilities) can lead to reduced payback periods.

The Power of Positive Cash Flow

The decision whether to do an energy upgrade project is ultimately based on cost. Energy upgrade projects can be cash-flow positive from the start. In addition to total costs, looking at your project on a cash-flow basis can help in your decision-making process. Assessing the financial viability of your project can be expressed by two simple equations:

- Total Cost = Project Cost – Incentives (grants, loans, alternative energy certificates)
- Cash Flow = Savings / month (energy, maintenance, demand charge.) – C (Costs / month (loan payments)

MassDEP Drinking Water Program Streamlined Review Process for Solar & Wind Projects on Public Water Supply Lands

12 solar projects have already been approved that have generated over 10 megawatts of energy and have saved hundreds of thousands of dollars in energy costs.

For More Information Contact: Kathy Romero, MassDEP,617-292-5727, Kathy.Romereo@state.ma.us

The guidelines / policies for solar/ and wind projects are located at:

http://www.mass.gov/eea/agencies/massdep/water/regulations/wind-and-solar-energy-project-on-public-water-supply-land.html

http://www.mass.gov/eea/docs/dep/water/laws/numeric/1101.pdf

Assessing In-Conduit Hydropower Potential in Existing Water Infrastructure

Alden Research Laboratory, Inc. has developed, on behalf of MassDEP and the Massachusetts Clean Energy Center (MassCEC), a screening tool for in-conduit (inside the pipe or channel) hydropower technologies with a focus on Water infrastructure opportunities managed by municipalities or districts. The screening tool enables a municipality to complete a preliminary evaluation of hydropower generation potential at water supply and waste water treatment facilities. With facts about a specific system and location (such as pressure or head and flow) a municipality can estimate power generation potential, and get some preliminary cost/benefit analysis results. The tool can be found here:

http://www.mass.gov/eea/agencies/massdep/climate-energy/energy/water-utilities/hydropower-project-screening-tool.html

Additional Information

For more information on these grants, see:
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Or use this friendly link to find out who to call in your town:
http://mass.gov/dep/muni-call

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