

**Water-Wastewater Focus
First Conference Call and Notes
May 12, 2005
1 p.m. – 3 p.m. EST**

EVENT: Initial Water-Wastewater Focus Meeting
MEETING DATE: May 12, 2005
MEETING LOCATION: Online Presentation and Telephone Conference
HOST ORGANIZATION: EPA

GOALS/ACTION ITEMS FOR THE FOCUS:

A Focus through ENERGY STAR® on water and wastewater is a natural expansion of EPA's ENERGY STAR commercial and industrial efforts with public and private sector organizations. For many ENERGY STAR partners, water and wastewater energy performance improvement represents a significant opportunity. Therefore, EPA's ENERGY STAR program is building an energy efficiency Focus in the water and wastewater industries. Focus participants will provide input to EPA about the following future program resources, tools, and opportunities:

- A strong network of partners (public and private drinking water organizations, POTWs/local governments, and related industry, national, and state associations).
- An Energy Performance Rating System (EPRS) for each industry that is normalized for the appropriate variables such as weather, climate, plant/system characteristics, and regional differences.
- An Energy Efficiency Assessment and Opportunities Report for each industry that describes best practices to increase energy and water efficiency.
- Energy Management Guidelines to help organizations set goals and determine action steps.
- Financing information that provides innovative solutions to paying for energy efficiency projects.
- Technical training and support for use of the EPA rating system and other ENERGY STAR tools.
- EPA recognition of energy performance improvement.

- Typically, a Focus lasts one to two years. After the focus phase and the successful development of the above program elements, EPA plans to expand the invitation to participate to all organizations from the water and wastewater industries.

ATTENDEES

Table 1 Focus Attendees, May 12, 2005

Company	Last Name	First name	Title	Phone	Email address
Alliance to Save Energy	McMorrow	Margaret			mmcmorrow@ase.org
Alliance to Save Energy	McMorrow	Margaret	Senior Engineering Associate	(202) 530-2248	mmcmorrow@ase.org
Alliance to Save Energy	Tutterow	Vestal	Program Manager	(202) 530-2241	vtutterow@ase.org
AMWA	VanDe Hei	Diane	Executive Director		vandehei@amwa.net
ASDWA	Mason	Deirdre		(202) 293-4643	dmason@asdwa.org
AWWA Research Foundation	Reekie	Linda	Senior Project Manager	(303) 734-3423	lreekie@awwarf.org
AWWA	Holmes	Tommy	Legislative Programs Manager	(202) 628-8303	tholmes@awwa.org
AWWA	Morley	Kevin			kmorley@awwa.org
California Energy Commission	Chaudhry	Shahid			schaudhr@energy.state.ca.us
Catalyst Financial Group, Inc.	Zobler	Neil	President	(203) 790-4177	nzobler@catalyst-financial.com
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CEE	Jones	Ted			tjones@cee1.org
City of Atlanta	Bhedwar	Cyrus			chbhedwar@atlantaga.gov
Columbus Water Works	Arnett	Cliff	Senior Vice President	(706) 649-3458	carnett@cwpga.org
EPRI Solutions	Carns	Keith	Director	(559) 642-2082	kcarns@gepllc.com
Lawrence Berkeley National Laboratory	Brown	Rich		(510) 486-5896	REBrown@lbl.gov
Metropolitan Council	Mereness	Mike	Manager Support Services	(651) 602-8296	mike.mereness@metc.state.mn.us
NACWA	Hornback	Chris			chornback@nacwa.org
NAWC	Clark	Cade	Director of State Relations		cade@nawc.com
NYSERDA	Joseph	Janet			jj2@nyserda.org
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NYSERDA	Hanna	Liz	Project Coordinator		ebh@nyserda.org

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Public Technology Institute	Mosley	Ronda	Director	(202) 626-2455	rmosley@pti.org
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The Cadmus Group, Inc.	Utebay	Kudret	Project Manager	(703) 247-6138	kutebay@cadmusgroup.com
U.S. EPA	Hatcher	Katy	ENERGY STAR National Manager	(202) 343-9676	hatcher.caterina@epa.gov
USEPA-OW-OGWDW	Shanaghan	Peter		(202) 564-3848	shanaghan.peter@epa.gov
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WEF	Thomas	Sharon		(703) 684-2423	stthomas@wef.org

HIGHLIGHTS

- Katy Hatcher, ENERGY STAR National Manager, Public Sector, welcomed participants to the first Water-Wastewater Focus call and presented an overview of what EPA plans to accomplish through this Focus. See May 12th, 2005 introductory presentation for details.
- Ms. Hatcher completed her presentation by introducing Rich Brown of Lawrence Berkeley National Laboratory (LBNL), who presented an Overview of Energy Use in the Drinking Water and Wastewater Industries. See May 12th, 2005 presentation for details. LBNL is working on the development of the energy best practice guides for the Focus as well researching general trends in both industries.
- Mr. Brown talked about opportunities for energy savings in the water and wastewater industry. For example, drinking water motors, drives, pumps and controls potentially provide 15% savings that is readily achievable, with up to 30% possible.
- Similarly, energy savings opportunities exist in wastewater process controls, motors, pumps, blowers, and biogas.
- Out-of-plant opportunities for energy savings include unaccounted for water, water end-use efficiency and solids disposal.
- Mr. Brown said the goal of energy performance benchmarking for the water and wastewater industries is to quantify the energy used to provide the service. It is also important to base benchmarking on measured data where practical and normalize for factors beyond the utility's control, such as population, the volume of water/wastewater delivered/treated and the mass of pollutants removed.

- Ms. Hatcher then introduced Steven Carlson of CDH Energy, who presented a project overview of AWWARF's Water and Wastewater Utility Energy Index. See May 12th, 2005 presentation for details. This project, hopefully, can be used as a foundation for a benchmarking system provided by the ENERGY STAR program once completed.
- Mr. Carlson said the goals of the utility energy index were to create industry-wide energy performance metrics for the water and wastewater utilities.
- Mr. Carlson spent time reviewing background metrics and parameters, as well as the methodology used and information models for water and wastewater.
- Mr. Carlson said task 1 would be a literature review in which the challenge would be to collect data on parameters that impact energy use. The review will include energy use, operation, characteristics, and surveys/data sources, among other parameters.
- Mr. Carlson provided a review of wastewater existing data, sources for that data, and wastewater classification size, treatment level, process use, process detail, and energy data.
- Mr. Carlson provided a review of water existing data, sources for that data, and water classification size, source/treatment, and distribution.
- Task 2 will be to assemble data sets. This includes creating a statistically representative survey of utilities, which is currently in the testing phase and has a spring implementation schedule.
- Task 3 will be data analysis. This analysis will identify parameters that explain energy use variation, define the ranking distribution from the data set, and formulate a comparison framework, all in a late summer/fall timeframe.
- Tasks 4 and 5 will include metric applications. Demonstrating the metric application will include the types/sources of data needed, rankings and parameter interpretations. The next step will include testing the metric by determining if poor rankings correspond to opportunities and if high rankings correspond to "Best Practices." Mr. Carlson said they will then review sites to determine participating utilities and outliers in the metric rankings.
- Task 6 will be the metric roll-out, through which Mr. Carlson hopes to demonstrate the usefulness of the project to utilities, provide example applications of the metric and present findings at a conference.
- When asked, Mr. Carlson said the timing of the metric roll-out will be around this time next year (June 2006). He said they will know a lot more this fall regarding where they stand, but he hopes to have the final report out by the end of 2006.

ACTION ITEMS

- Ms. Hatcher then discussed next steps for the Focus, which will include discussions via bi-monthly conference calls and presentations. The next session will occur in July.
- Ms. Hatcher requested feedback from today's session and based on the feedback added ENERGY STAR Recognition as a topic of the July call.