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Have Your Treatment ... And Power It Too



Municipalities and industrial groups must think several steps ahead when constructing and updating their water and wastewater facilities. Because regulations and community needs constantly are evolving, it is in facility managers' best interest to seek out flexible, long-term treatment

and compliance solutions.

One term on the lips and minds of these future-focused managers is "advanced treatment;" another is "energy efficiency." But how to achieve both of these goals? When using membrane technology, putting lost or untapped energy to use is the name of the game.

First on the energy-wise agenda is seeking out areas where the introduction of new equipment and/or processes can reduce power consumption. Third-party consultants are available specifically to conduct energy audits—a one-time investment that can give rise to far-reaching benefits. Whether analyzed entirely in house or with outside help, it is key to consider not only the initial price tag when weighing options, but also operating and maintenance costs, expected lifetime of equipment, potential fines avoided and other big-picture financial factors.

Producing energy—on or off site—presents another opportunity for affordable and green advanced treatment. Sustainable energy systems (e.g., biogas, solar, wind) are more than just a fad: They are the wave of the future. If generating their own energy is not possible, facilities may consider power partners.

When planning for facility modifications and installations, it is important to explore energy credits and grants available at the local to national levels: They may provide additional financial relief. Once changes have been implemented, track results throughout the year and from year to year, fine-tuning processes and technologies along the way.

It is no simple task, but water and wastewater facilities nationwide are finding practical ways to supplement their energy resources or get off the grid completely. Reducing power consumption keeps treatment levels high and electric bills low. While energy is a—if not *the*—significant cost factor in operating these facilities, it also is a moderately controllable one.

Also, the editorial team hopes to see many of you at the AMTA/AWWA Membrane Conference in Glendale, Ariz., Feb. 27 to March 1. These associations have partnered to quench North America's thirst for membrane knowledge and solutions. Be sure to stop by *Water & Wastes Digest's* booth (#106).

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