

# Green Buildings

DASNY Case Study

## DASNY's Clean Energy Goal:

To use strategies that reduce energy waste and usage, and maximize renewable energy sources, such as solar, wind, and geothermal, while maintaining the comfort and well-being of building users.



### When is the best time to address energy efficiency and other energy issues in your organization? **Now!**

Implement energy efficiency early in the process of building design for new buildings and continuously monitor and improve energy usage in existing buildings.

#### How?

As equipment ages there are ample opportunities to upgrade to more efficient components or technologies, but even more effective is to regularly assess the performance of the whole building. Tracking energy use is incredibly informative and can be managed through the Energy Star Portfolio Manager from the Environmental Protection Agency (EPA).

Performing retro-commissioning, an energy audit, or working through the LEED for Existing Buildings Operations and Maintenance process will help to identify opportunities and prioritize them as well as give you tools for implementation. Check into possible incentives from the utilities, New York Power Authority and New York State Energy Research and Development Authority.

The most important aspect DASNY has learned is that we can increase our achievements by working with the staff who maintain the building, as well as those that work within the building. To reach exceptional levels of efficiency, the people (staff) must take part. For example, in a building of high efficiency (like a LEED Gold rated building) the plug loads can be as much as half the energy use and most plug loads are directly controlled by the employees.



**Communicate with staff** – share the efforts with your staff and help them see the benefits of the projects as well as the pride in managing your facility well. People learn in various ways so use multiple methods for this outreach.

**Seek inputs** – provide varied ways to receive input from your staff. When you address concerns, communicate back to them what was done and what you expect will be gained.

**Collaborate** – interact with colleagues within your agency to identify and implement projects.

**Make the case** – look at cost savings and simple payback, as well as how the project will improve services for clients and work environment for staff.

#### Contact

To learn more about DASNY's accomplishments, please contact Jodi Smits Anderson at [jsmitsan@dasny.org](mailto:jsmitsan@dasny.org) or 518-257-3486.

For questions specific to Executive Order 4 and Green Purchasing, email [GreenEO4@ogs.ny.gov](mailto:GreenEO4@ogs.ny.gov).



DASNY

## What has DASNY achieved?

- **Save money** – DASNY has reduced its yearly energy budget for its headquarters in Albany by more than 40%, even with cost changes in electricity and gas.
- **Reduce volatility of budget** – because of the progress made, a smaller part of DASNY’s budget is needed for volatile energy costs. This level of budget control is a big win for facility managers.
- **Support state goals** – DASNY buys 100% of its electricity as green-e certified renewable energy credits, which promote market development of renewable energy and state goals to increase renewable energy use.
- **Earn money** – DASNY supports electrical grid management by being part of a Peak Demand Program. During times of peak demand and possible brown or black-outs, DASNY receives a payment for reducing for electricity use when requested by the utility or Public Service Commission.
- **Protect natural resources** – significant energy use reduction through energy use effectiveness, reliance on renewable resources, and peak energy reductions all help grid management. These are all good stewardship methods for limited resources.

## What Changes has DASNY implemented?

- Replaced overhead lighting with National Grid cost share, which resulted in a six-month return on investment and better lighting quality.
- Re-configured lighting on emergency and night modes to reduce over-lighting.
- Used security access cards to manage lighting in 1-hour increments before and after typical daily work hours.
- Allowed temperature to float between 68-78 degrees so the building can relate to environmental conditions. This adjustment is saving more than \$10,000 a year in energy costs. DASNY also encourages its staff to dress seasonally and control their own comfort.
- Changed cleaning process in second shift to floor-by-floor cleaning, instead of building-wide cleaning, to reduce lighting needed by 75% during cleaning shift.
- Installed variable speed drive belts to reduce power to motors when possible, CO<sub>2</sub> sensors in conference spaces to reduce outside-air conditioning, and copious occupancy sensors throughout the building to reduce waste of energy.
- Installed LED accent lighting, street lights, and mounted lights outside the building to save energy and labor costs.
- Deployed a multi-function copier fleet with *FollowYouPrint* management system to reduce energy use, improve capabilities for staff and eliminate “abandoned” prints.



## Highlights

- Identify and eliminate energy waste
  - Make existing energy usage as efficient as possible
  - Purchase energy efficient equipment
  - Optimize building performance
- Use as many renewable energy resources as possible
- Think beyond the building and engage staff
  - Encourage employees to dress for the weather and their personal comfort
  - Change janitorial cleaning timing
  - Incentivize personal behavior change

**Learn More!**

**[www.dasny.org](http://www.dasny.org)**



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