

NO DEBT, NO COST, NO HASSLES:

5 Steps to Energy Savings



County and local governments, schools, state colleges and other government organizations have the tools they need to save energy, save money and save 100 percent on the capital investment. The Energy Savings Improvement Program or ESIP, created by New Jersey's legislature in 2009, allows governments to improve their buildings by upgrading heating and cooling systems, fixing drafts, and other steps without new debt. In fact, all the improvements can be paid for through the energy savings.

It is the best way to keep all government buildings warm in the winter and cool in the summer without impacting taxpayers' wallets.

Concord Engineering can help.

1

COMPLETE THE ENERGY AUDIT

The first step in developing an ESIP is conducting an energy audit to identify how much energy the buildings use now and the energy conservation measures that can maximize savings. Energy conservation measures could include improvements to HVAC systems; solutions using solar, wind or geothermal; lighting improvements; water savings; and equipment to improve energy efficiency. The audit is done by an independent and pre-qualified company.

To date, Concord Engineering has performed energy audits on 143 school buildings with recommended energy conservation measures amounting to reductions of 21,401 metric tons of CO₂ per year. That is equal to taking 3,891 cars off the road.

2

SELECT A CONTRACTING MODEL

Contracting can be done by an energy services company, by your own organization, or in a hybrid program where both take responsibility. If you go with an energy services company, they must agree to provide an optional guarantee of energy savings.

Regardless of which model is chosen, the success of the project and accrual of savings depends on a solid plan, competent construction and installation and ongoing maintenance. All these components are essential to optimize savings.

Engineering savings you can count on.



3 DEVELOP THE ENERGY SAVINGS PLAN

The energy savings plan is the core of the ESIP process. It describes the energy conservation measures that are planned and the cost calculations that support how the plan will pay for itself in reduced energy costs. The plan will estimate greenhouse gas reductions, identify design and compliance issues and responsibilities, calculate costs and projected energy savings, and identify maintenance requirements, among other things.

4 FINANCING

Financing an ESIP is based on the principle that the energy cost savings will pay for themselves. ESIPs can be financed through energy savings obligations, primarily through debt and lease-purchase agreements. When combined with other state and federal incentives, ESIPs can be done without the need for state aid or increases in local taxes.

5 DESIGN, INSTALL & VERIFY IMPROVEMENTS

A third party must verify the energy savings plan and systems after installation by:

- Calculating savings using New Jersey Board of Public Utilities (NJBP) protocols.
- Employing commissioning services to verify that the system was installed properly.
- Ensuring that the system operator maintains the system in accordance with specifications.

Once the energy savings plan has been verified by an independent third party, approved by the local governing entity and filed with the NJBP, specifications and construction plans will follow, leading to construction.

Concord Engineering's seasoned expertise in turnkey energy solutions makes us one of only five firms in New Jersey approved to conduct cost-saving audits. As the leader in alternative financing and state/federal incentives for energy conservation, we have conducted more than 400 energy audits.