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# Local Finance Notice

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## Implementing an Energy Savings Improvement Program P.L. 2009, c.4

A new State law allows government agencies to make energy related improvements to their facilities and pay for the costs using the value of energy savings that result from the improvements. Under the recently enacted Chapter 4 of the Laws of 2009 (the law), the "Energy Savings Improvement Program" (ESIP), provides all government agencies in New Jersey with a flexible tool to improve and reduce energy usage with minimal expenditure of new financial resources.

This Local Finance Notice outlines how local units (all entities falling under either the Local Public Contracts Law or Public School Contracts Law) can develop and implement an ESIP for their facilities. ESIP also affects county colleges, though they do not have options related to competitive contracting, have different financing options and will receive guidance from the State's Higher Education Facility Financing Authority. The ESIP law grants similar authority to State agencies and while they follow the same general model, they will receive implementation guidance from the Department of Treasury.

The ESIP approach may not be appropriate for all energy conservation and efficiency improvements. Local units should carefully consider all alternatives to develop an approach that best meets their needs. Local units considering an ESIP should carefully review this Notice, the law, and consult with qualified professionals to determine how they should approach the task.

The Notice provides both guidance and direction for local units and is divided into the following sections:

- I. Energy Savings Improvement Plan Basics
- II. Developing and Implementing an ESIP
  - A. The Energy Audit
  - B. Development and Approval of an Energy Savings Plan
  - C. Role of Energy Services Companies
  - D. Design, Installation and Verification of Improvements
  - E. Financing the ESIP
- III. ESIP Related Directives
- IV. Conclusion

The law is organized into several sections, each addressing different government agency contracting laws (i.e., Public Schools Contracting, Local Public Contracting, etc.). Within each section, the ESIP process is generally the same; the differences are found in financing procedures. Regulations codifying various elements are being developed and will follow shortly. Until the regulations are adopted this Notice serves as directive in nature.

The Division of Local Government Services is working with the Board of Public Utilities (BPU) to develop a best practices handbook, and model contracting documents. These will be developed and distributed over the next few months.

Local officials should also be aware that the BPU, through its [Office of Clean Energy \(OCE\)](#) Commercial and Industrial program offers a wide range of energy efficiency and renewable incentive programs, some of which can be integrated with an ESIP. These include the [Local Government Energy Audit Program](#), the [CleanPower Community Partners Program](#), and other incentives described on the OCE website. In addition, the new [Sustainable Jersey Program](#) provides support and information on energy conservation and efficiency programs to municipal governments.

Recipients are asked to share this Notice with appropriate staff in their organization.

## I. Energy Savings Improvement Program Basics

The ESIP allows local units to use “energy savings obligations” to pay for the capital costs of energy improvements to their facilities, and paying for annual costs of the obligations with the savings from reduced energy costs. Energy savings obligations are not considered “new general obligation debt” of a local unit and do not count against debt limits or require voter approval. They may be issued as refunding bonds or leases. This is covered in greater detail in Section II-E.

The law provides the framework to use energy savings obligations to finance energy improvements. **The provisions of the law can only be used when energy savings obligations are used to finance improvements.** Nothing in the law prevents a local unit from designing, implementing, and financing energy improvements through traditional contracting and debt authorization procedures.

There are three general issues that are important to developing and implementing an ESIP; public bidding of construction work, developing of an energy services plan, and use of state approved contractors for all ESIP work. Each of these is discussed below.

The first issue is that all ESIP work that meets the traditional definition of “public work” contracting (N.J.S.A. 34:11-56.26<sup>1</sup>) is subject to prevailing wages and public bidding. This

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<sup>1</sup> N.J.S.A. 34:11-56.26. Public work means any construction, reconstruction, demolition, alteration or repair work, or maintenance work including painting and decorating, done under contract and paid for in whole or in part out of the funds of the public body, except work performed under a rehabilitation program. Public work also means construction, reconstruction, demolition, alteration, or repair work done on any property or premises, whether or not the work is paid from public funds, if at the time of entering into the contract:

1. Not less than 55% of the property or premises is leased by a public body, or is subject to an agreement to be subsequently leased by the public body; and
2. The portion of the property or premises that is leased or subject to an agreement to be subsequently leased by the public body measures more than 20,000 square feet.

includes the usual requirements that follow a public works contract, such as bid specifications, listing of required subcontractors, surety bonding, public works contractor registration, and award to the lowest responsible bidder, etc.

The second issue is how a local unit develops and implements an ESIP. The key element is the preparation of an energy savings plan (ESP). The content of the ESP is covered in Section B-2. Subject to the framework of the law, a local unit has flexibility to use a model that best fits its needs. There are three primary ways an ESP can be developed:

- 1) Through the use of an “energy services company,” commonly known as an “ESCO.”
- 2) Through the use of independent engineers and other specialists, or using the local unit’s own staff to provide and manage the individual functions that make up an ESP.
- 3) Through a “hybrid” model, where an ESCO may be hired for some purposes (i.e., the development of the ESP) and the local unit’s engineer may prepare bid specifications.

ESCOs are commercial entities that are qualified to develop and implement an energy savings plan. Traditionally an ESCO can develop the ESP, design the improvements, manage the construction, and oversee the startup (“commissioning”) of the improvements. ESCOs may also provide a guarantee of energy savings. Several ESCOs also manufacture energy systems (i.e., boilers, chillers, ventilating systems) and the controls that run the system. The law has special procedures concerning ESCO guarantees and controls, Section E discusses them in detail.

When using its own resources or contracting for individual services, a local unit would use professional service contracting as appropriate, and hire construction contractors pursuant to traditional public bidding contracting laws and procedures.

Under the “hybrid” model, either an ESCO or the local unit’s design professional could be responsible for project management, specification development, or other elements of the work.

Local units are also reminded that neither the Local Public Contracts Law or the Public School Contracts Law permit “mandatory bidder meetings” for competitive contracting or for public bidding. These meetings may be advisory in nature and recommended, but potential proposers or bidders cannot be penalized or prohibited from submitting proposals or bids if they fail to attend such a meeting.

**Finally, the law requires that all contractors (at any level) performing ESIP work must be listed or qualified by the [State Division of Property Management and Construction](#) (DPMC).** This DPMC procedure is already required for all public school and State construction work, and is required for any government agency using the ESIP procedure. DPMC recently expanded their trade/discipline listings to include ESCOs and firms qualified to perform measurement and verification (both energy auditing and building commissioning firms). Government agencies that contract for engineering or architectural services should ensure that their consultants have properly filed with the DPMC and have a proof of approval.

DPMC listed construction trade contractors and prequalified professional services consultants meet specific qualification and experience standards. They are also evaluated on the dollar volume of

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contracts in which they can engage and provided with a dollar rating for the services they are approved to provide. Details on the DPMC process and practices are available on their [website](#).

To summarize, all ESIP-based bid or RFP specifications related to the qualifications of contractors and sub-contractors (at any level) must require DPMC contractor classification listing or consultant prequalification approval as a prerequisite.

## **II. Developing and Implementing an ESIP**

### **A. The Energy Audit**

The first step in developing an ESIP is to conduct an energy audit. The energy audit shall identify the current energy use of any or all facilities and “energy conservation measures” that can be implemented to realize and maximize energy savings and energy efficiency. The statutory definition of energy conservation measures reads:

an improvement that results in reduced energy use, including, but not limited to, installation of energy efficient equipment; demand response equipment; combined heat and power systems; facilities for the production of renewable energy; water conservation measures fixtures or facilities; building envelope improvements that are part of an energy savings improvement program; and related control systems for each of the foregoing. (See Appendix A for detailed examples of energy conservation measures).

Note that the definition includes “water conservation measures” which, in turn is defined as “an alteration to a facility or equipment that reduces water consumption, maximizes the efficiency of water use, or reduces water loss.” For the purposes of ESIPs, water conservation is included in references to energy savings.

Other important elements of the energy audit include Energy Audit Standards, Contracting for Auditors, and Open and Transparent Competition. Each of these is discussed below.

### **Energy Audit Standards**

There are several types of industry-standard energy audits:

#### Level 1 - Walk-through Assessment

A walk-through assessment involves assessing a building’s energy cost and efficiency by analyzing energy bills and conducting a brief survey of the building. A Level 1 energy analysis will identify and provide a savings and cost analysis of low-cost/no-cost measures. It will also provide a listing of potential capital improvements that merit further consideration, along with an initial judgment of potential costs and savings.

#### Level II - Energy Survey and Analysis

An Energy Survey and Analysis includes a more detailed building survey and energy analysis. A breakdown of energy use within the building is provided. A Level II energy analysis identifies and provides the savings and cost analysis of all practical measures that meet the owner’s constraints and economic criteria, along with a discussion of any effect on operation and maintenance procedures. It also provides a listing of potential capital-intensive improvements that require more thorough data

collections and analysis, along with an initial judgment of potential costs and savings. This level of analysis will be adequate for most buildings and measures.

### Level III - Detailed Analysis of Capital-Intensive Modifications

A Detailed Analysis focuses on potential capital-intensive projects identified during Level II and involves more detailed field data gathering and engineering analysis. It provides detailed project cost and savings information with a high level of confidence sufficient for major capital investment decisions. It is also known as an “investment grade audit.”

The standards of the BPU Local Government Energy Audit Program serve as the requirements for the type of audit conducted as part of an ESIP. A Level 1 audit will not provide adequate information for informed decision making. Under the BPU model, a Level III audit is required for lighting efficiency improvement projects, and a Level II for all other potential energy conservation measures.

In circumstances where the local unit has its own qualified staff to conduct the audit, those individuals may participate in the preparation of the ESP otherwise the local unit must contract for audit services. Contracted audits services can be performed by an independent contractor, but cannot be performed by an ESCO that will be contracted to perform other ESIP services.

### **Contracting for Auditors**

The DLGS has determined that the “energy audit” service does not meet the standard of a professional service under the contracting laws, but does fall under the provisions of competitive contracting. Local units can contract for energy audit services through competitive contracting, public bidding, or use the State contract ([T-2545](#)). The professional services exception cannot be used to hire an energy auditor, even if those services are provided by a professional engineer. Any auditor hired as part of an ESIP must be prequalified by the DPMC.

At this time, the BPU audit program provides a 75 percent grant for the cost of the audit and the local unit must provide the remaining 25 percent as matching funds. The BPU will reimburse the 25 percent match when improvements that offset that cost are implemented.<sup>2</sup> The audits are conducted under common standards by vendors chosen through a State contract. Subject to laws affecting a local unit, matching funds can be appropriated outside of budget caps (appropriation and levy) through appropriations for, or from capital improvement funds, or as preliminary expenses of a bond ordinance that may be used to fund the improvements. Details on the Local Government Energy Audit Program are available at the [Office of Clean Energy website](#).

### **Open and Transparent Competition**

The law provides that an ESCO engaged to prepare the Energy Savings Plan cannot conduct the energy audit. This requirement ensures that the audit will be prepared by an independent third party to provide the local unit with information concerning the range of potential energy conservation measures. This approach ensures a level playing field, so that vendors competing to develop the Energy Savings Plan have an independent document on which to base their proposals.

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<sup>2</sup> The BPU can change the requirements for matches and other program elements. The most recent information is available on the [Clean Energy website](#).

Consistent with the principles of open competition, equity, and transparency, an auditor who performed an audit for a local unit cannot be hired by an ESCO that is subsequently contracted to do work for the same local unit. Individuals who worked on the audit would have special information about the project which could unfairly affect competition among ESCO vendors and could lead to unethical or inappropriate business practices.

These principles also mean that all vendors considering submitting a response to an RFP for an ESCO must have a level playing field and equal access to the results of the audit. Generally, the audit must be completed prior to issuing a competitive contracting RFP for an ESCO. In order for ESIPs to move expeditiously, but be consistent with State law, there is room for a modified approach that can save time and comply with the law when the services of an ESCO are planned.

The Division is authorizing an alternative, “compressed-timeframe” approach to support an expedited process. This permits the ESCO RFP process to begin (RFP advertised), but without the completed (but underway) audit in hand. The process must then be timed in such a way that all potential bidders are provided the audit and are then given the minimum 20 days required under a competitive contract to submit proposals. This requires the local unit to ensure that it has contact information of the parties that receive copies of the RFP and to forward a copy of the audit once it is received. It may also require that due dates be changed.

In addition, when this compressed-timeframe is used, the local unit should include any “scope of work” documents that were provided to the audit firm as part of the RFP documents. This will also facilitate the process by providing useful information to the interested parties.

## **B. Development and Approval of an 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. Under the law, the ESP must address the following elements:

- the results of the energy audit;
- a description of the energy conservation measures that will comprise the program;
- an estimate of greenhouse gas reductions resulting from those energy savings;
- identification of all design and compliance issues and identification of who will provide these services;
- an assessment of risks involved in the successful implementation of the plan;
- identify the eligibility for, and costs and revenues associated with the PJM Independent System Operator for demand response and curtailable service activities;
- schedules showing calculations of all costs of implementing the proposed energy conservation measures and the projected energy savings;
- maintenance requirements necessary to ensure continued energy savings, and describe how they will be provided; and
- if developed by an ESCO, a description of, and cost estimates of a proposed energy savings guarantee.

The ESP requires several other important elements:

1. The calculations of energy savings must be made in accordance with protocols for their calculation adopted by the BPU. The calculation shall include all applicable State and federal rebates and tax credits, but shall not include the cost of an energy audit and the cost of verifying energy savings. The protocols are expected to be adopted by the BPU shortly.
2. An independent third party must review the plan and certify that the plan savings were properly calculated pursuant to the BPU protocols.
3. If an ESCO is used to prepare the plan, the ESCO must provide an estimate of the cost of a guarantee of energy savings. When adopting the plan, the local unit must decide whether or not to accept the guarantee (covered below).
4. If an ESCO is not used, the technical nature of the plan allows use of the bid exception for professional services contracting when the work to be performed meets the definition of professional services under the relevant contracting law.
5. The plan must be verified by an independent third party to ensure that the calculations were made in accordance with the BPU standards and that all required elements of the ESP are covered.
6. After verification is completed, the governing body must formally adopt the plan. At that point, the plan must be submitted to the Board of Public Utilities where it will be posted on the BPU website. **BPU approval is not required.** If the contracting unit maintains its own website, the plan must also be posted on that site.
7. The BPU is authorized to receive periodic reporting concerning the implementation of the Energy Savings Plan. This requirement has not yet been implemented.

The law defines “energy savings” as “a measured reduction in fuel, energy operating or maintenance costs resulting from the implementation of one or more energy conservation measures when compared with an established baseline of previous fuel, energy, operating or maintenance costs, including, but not limited to, future capital replacement expenditures avoided as a result of equipment installed or services performed as part of an energy savings plan.”

Note that the next to the last clause of the definition above allows for replacement of an element (i.e., a boiler) that may not have yet reached its end of service, but if other things are being replaced, the law provides a method to discount the energy savings that result from that replacement at the same time other work is being done.

The law also recognizes there may be cases where making some energy improvements may lead to a desire to make improvements that do not reduce energy use. An example may be an older school building that can have its boiler and ventilating system replaced, and have a digital control system installed. While these may reduce energy use, the Board of Education may also want to add air conditioning, an improvement that does not reduce energy use, but may be a useful and efficient improvement for the facility.

In this example, the law permits “energy-related capital improvements” that do not reduce energy usage to be included in an energy savings improvement program. The cost of the improvements, however, cannot be financed through energy savings obligations, but must be paid for through other appropriations (i.e., bonds or capital improvement funds). It is not the intent of the law to prevent financing of such capital improvements through otherwise authorized means.

### C. Role of Energy Services Companies

ESCOs can play an important role in ESIPs. They can provide a local unit a full “soup-to-nuts” approach, assuming responsibility for the entire process, from preparation of the Energy Savings Plan, to design and preparation of construction plan documents and bid specifications, to serving as a general contractor by contracting with and overseeing subcontractors hired through the bidding process, to providing an energy savings guarantee, or provide any of the individual elements. When preparing a competitive contracting RFP, the local unit should carefully consider the role it wants the ESCO to play, particularly with regard to the role of other agency professionals.

As such, the law addresses several provisions regarding the unique nature of ESCOs. Some of these provisions are different from ESCO laws in other states.

**First** (and discussed above), is that an ESCO cannot prepare the initial energy audit. This is to preserve the independence of the process and to ensure that the audit covers all energy conservation measures, not just the expertise possessed by an individual ESCO.

**Second**, ESCOs shall be hired through the competitive contracting process and cannot be hired through the professional services exception. In preparing a competitive contracting RFP for ESCO services, the local unit should provide the energy audit and ensure that qualifications and experience of an ESCO are addressed in terms of the items recommended in the audit. As long as the ESCO retains ultimate responsibility for the work, they may rely on subcontractors – this is a common industry practice. ESCOs and their subcontractors must also be pre-qualified or listed with the DPMC. The competitive contracting process requires the local unit to identify criteria to serve as the basis of an award to an ESCO. These criteria should reflect local needs, but would normally include experience with the type of ECMs that are recommended in the audit, scope of services they propose, price of the services the ESCO will provide, and initial estimates of savings.

**Third**, an ESCO is required to provide a cost estimate of a energy savings guarantee, and then enter into a guarantee agreement if the local unit determines it useful. When the ESCO concept was developed and originally implemented in other states over 20 years ago, a guarantee was considered essential to ensure that the system would perform as specified and that the promised savings would accrue. At the same time, guarantees required that the owner maintain the system in accordance with the manufacturer’s specifications, that adjustments would be made to reflect change in energy use from the initial baseline, and that specialized monitoring systems would be installed to monitor the system’s performance – at added cost to the owner.

Since that time, the technology of energy systems has evolved to the point that in many cases a guarantee may not be required. Key elements of this change include the international standards (the basis for the BPU protocols) for calculating energy savings, lower cost monitoring systems, and the requirement that the plan is verified three ways: 1) with savings being calculated in accordance with the BPU protocols, 2) that the system was installed properly (“commissioning”), and, most importantly, 3) that the system operator maintains the system in accordance with specifications. If these elements are in place, the energy savings will accrue without the need for a guarantee. Local units should carefully consider the need for a guarantee and measure its cost, given the verification requirements that are part of the process.

With or without an ESCO guarantee, ongoing maintenance as recommended by an ESCO or manufacturer specifications is required to achieve the projected energy savings. Maintenance should also include a periodic verification of the system to make sure the maintenance is properly conducted and the system is meeting the original specifications and design.

If the owner fails to maintain the system, an ESCO guarantee may be voided and added energy costs will be incurred. If there is no ESCO guarantee and the owner fails to properly maintain the system, savings will be lost

and the local unit will incur additional energy costs, as they will continue to pay for the improvements and more for energy that did not need to be consumed.

If a guarantee is used, the law requires a third party (not the ESCO) perform the calculations necessary to see if the guarantee is met, and the periodic cost of the calculations cannot be financed through energy savings obligations. A guarantee can be for any length of time; it does not have to be for the useful life of the improvement. In some cases, a guarantee for a limited period of time may be appropriate and cost-effective.

**Fourth**, an ESCO can serve in various capacities in an ESIP. The cost of ESCO services must be absorbed as part of the overall calculation of energy savings. In this role, the ESCO can perform any or all of the following activities:

- Prepare the energy savings plan;
- Prepare construction plans and specifications (assuming the ESCO uses a licensed architect or engineer as appropriate to the work);
- Serve as the general contractor of the project, and following the laws and requirements of the owner by publicly bidding and public works contracting, employ subcontractors, and perform other duties traditionally performed by a general contractor;
- Serve as project manager, and on behalf of the owner, be responsible for and oversee project schedules, supervise subcontractors and installation work, oversee performance and quality of the work, approve payment of subcontractors, project completion, commissioning, and savings implementation; except that a subsidiary or wholly-owned or partially-owned affiliate of an ESCO cannot serve as a contractor or subcontractor;
- Handle allocation of State and federal rebates and tax credits;
- Handle the financing of energy savings obligations (usually leases); and,
- Any other provisions deemed necessary by the parties.

**Fifth**, for projects guaranteed by an ESCO that manufactures its own digital energy control system, the ESCO can specify its own equipment as part of the construction bid specifications. Under the law, these “direct digital controls” (DDC) are declared to be “proprietary” in nature, which permits their specification in lieu of any other manufacturer’s products. When bidding, the specifications shall provide an “allowance” amount for the cost of the DDC; meaning that the cost of the DDC equipment **shall not** be a part of the determination of the lowest responsible bidder. The allowance is a fixed amount set by the ESCO and is used by all bidders. The ESCO has the incentive to keep the cost low to ensure that the overall savings are not jeopardized. The cost of installing DDC, however, is part of the bid calculation.

Non-DDC items that are manufactured by an ESCO must be specified as an “or equal” or be based on industry standards and LPCL rules (N.J.A.C. 5:34-9.1 and 9.2), and cannot be restricted to the ESCO, unless all requirements of “proprietary goods and services” rule are met.

**Sixth**, when an ESIP mixes ESCOs and other services, there is the potential for professional or monetary conflicts of interests. Local units should ensure that contracting relationships do not create conflicts of interest or provide potential monetary incentives that go beyond the contract with the local unit. For example, if the local unit’s architect or engineer is determined to be the best qualified to prepare design specifications and plans based on an energy savings plan prepared by an ESCO, the local unit must hire and pay the professional; the professional cannot be hired by and be contractually responsible to an ESCO.

**Finally**, an agreement with an ESCO must contain a requirement that the savings that are achieved by energy conservation measures will be verified upon commissioning of the improvements.

#### **D. Design, Installation and Verification of Improvements**

Once an Energy Savings Plan has been verified by an independent third party, approved by the local unit governing body, and filed with the BPU, the project becomes a “routine” public works project. Design of construction plans and preparation of specifications follow, with contracts for the necessary professionals being executed by the governing body or provided through the contract with an ESCO.

The law is very specific about how improvements are made or implemented. As discussed in Section I, the routine public works construction contracting procedures of the local unit are followed, whether or not an ESCO is used. This includes requirements regarding public bidding, bid security, performance guarantees, insurance, and other requirements that are applicable to public works contracts.

Once plans and bid specifications are prepared, the governing body advertises for bids, and the usual course of contracting is followed. If the ESCO or project engineer is engaged as a project manager, they may have a role in reviewing and recommending award of contracts. The role of all professionals and an ESCO must be clearly defined in its contractual arrangements, in bidding documents, and with its professionals or ESCO.

When construction is completed, most energy improvement projects require “commissioning;” the process of starting, testing, and adjusting the improvements to make sure they are working in accordance with the design and meeting the projected energy savings. In many cases, specialized service providers known as “commissioning agents” serve this role. The DPMC also has a listing of prequalified “Building Commissioning” firms approved to provide commissioning services.

In addition, local staff must be trained in the use of the system and be taught how to perform routine maintenance unless maintenance will be performed under a separately procured service contract (service contracts are not part of the ESIP process and are subject to the local unit’s procurement laws). Training requirements should be explicitly required in bid documents or ESCO contracts.

Contract documents should also ensure that there is sufficient retainage of contractor funds to ensure that the contractor is not fully paid until the system is successfully commissioned.

The law requires that once commissioning is completed, an independent third party must review the system to make sure the standards set by the Energy Savings Plan are met – that the system is meeting the requirements of the plan. This party could be the commissioning agent if independent from other contractors (and an ESCO), or could be the original auditor or Energy Savings Plan verifier. If this is successfully completed, the local unit can be assured, that with proper maintenance, the system will perform as planned, and energy savings goals realized.

Finally, if the project involves an ESCO guarantee, contracts should be executed with a third party to conduct a periodic review of energy use on the agreed upon guarantee schedule. The costs to conduct the review are paid from the local unit’s annual budget, and are not part of the energy savings calculation.

#### **E. Financing the ESIP**

An ESIP can be financed through energy savings obligations. The term refers to the two primary financing tools, debt and lease-purchase instruments. Each of these options is discussed below.

Financing an ESIP is based on the principle, that with certain exceptions (i.e., audit and verification costs), the cost of the improvements (including planning, design, engineering, construction, etc.) will be paid through the value of reduced energy costs. Using the BPU protocols for calculating savings, energy costs, and inflation as standards across all local units is a critical component of the ESIP.

Energy savings obligations shall not be used to finance maintenance, guarantees, or the required third party verification of energy conservation measures guarantees. Energy saving obligations, however, may include the costs of an energy audit and the cost of verification of energy savings as part of adopting an energy savings plan or upon commissioning. While the audit and verification costs may be financed, they are not counted in the energy savings plan as a cost to be offset with savings.

In all cases, the maturity schedules for energy savings obligations must not exceed the estimated useful life of the individual energy conservation measure.

An ESIP can also include installation of renewable energy facilities, such as solar panels. Under an energy savings plan, solar panels can be installed, and the reduced cost of energy reflected as savings. Alternatively, a power purchase agreement that is executed pursuant to Chapter 83 of P.L. 2008 can be included in the calculations of energy savings. [Local Finance Notice 2009-10](#) reviews renewable Power Purchase Agreements contracting under Chapter 83. Since the ESIP legislation amended parts of Chapter 83, readers should be sure to refer to the most recent statutory references when reviewing the laws.

The law also provides that the cost of energy saving obligations may be treated as an element of the local unit's utility budget, as it replaces energy costs. The Division of Local Government Services and Department of Education are currently reviewing the mechanics of this process in light of budget cap and disclosure issues and will provide guidance on budgeting of energy saving obligations.

### **Debt Issuance**

The law specifically authorizes municipalities, school districts, counties, and fire districts to issue refunding bonds as a general obligation, backed with full faith and credit of the local unit to finance the ESIP. Because an ESIP does not effectively authorize new costs or taxpayer obligations, the refunding bond is appropriate and proper, as it does not affect debt limits, or in the case of a board of education, voter approval. The routine procedures for refunding bonds found in the Local Bond Law and Public School Bond Law would be followed for issuance of debt, along with any required Bond Anticipation Notes as authorized pursuant to law.

With regard to bonds for public schools, the Department of Education (DoE) has concluded that debt financed ESIP projects are not covered by State aid for debt service or a "Section 15 EFFCA Grant" as there is no new local debt being authorized. State debt service aid will be available for those portions of an ESIP that includes other non-energy savings improvements that will be paid through voter-approved debt. As a refunding bond, however, school energy savings obligations are eligible for coverage under the school bond reserve fund. Finally, projects funded under an ESIP program require DoE "Other Capital" Project approval. Additional information on school debt issues can be found at [www.state.nj.us/education/facilities](http://www.state.nj.us/education/facilities).

### Lease Purchase Financing

The use of lease-purchase financing has been used by ESCOs since the concept was created in the 1980s. The use of lease purchase financing eliminated the need of a local unit to issue debt and in the case of public schools, to obtain voter approval.

A local unit can enter into a lease-purchase agreement to implement an ESIP with a single investor lease or certificates of participation. The agreement can be entered into directly by the local unit, with ESCO, other private financing party, or through a county improvement authority or the New Jersey Economic Development Authority. When a local unit enters into a lease with a private party that is not a governmental entity, or with the ESCO it has selected through competitive contracting, it must be done in accordance with a competitive process as required under the local unit's procurement law.

The following additional requirements affect ESIP leasing:

- i. Ownership of the energy savings equipment or improvements shall remain with the third party financing entity until all lease payments have been made or other requirements of the financing documents for the satisfaction of the obligation are met. If improvements are made to facilities owned by the local unit, the local unit will have to enter into a ground lease of the facilities to be leased back to the local unit.
- ii. The duration of a lease-purchase agreement shall not exceed 15 years, except that the duration of a lease purchase agreement for a combined heat and power (CHP) or cogeneration project shall not exceed 20 years. CHP and cogeneration facilities are specialized types of energy conservation measures. The law supersedes the existing 5 year limit on lease-purchase financing for these types of projects.
- iii. Any lease purchase agreement may contain a clause making it subject to the availability of sufficient funds as may be required to meet the extended obligation; or a non-substitution clause maintaining that if the agreement is terminated for non-appropriation, the contracting unit may not replace the leased equipment. While normal for these types of leases, the optional nature in the law permits the transaction attorney to negotiate them as terms of a lease agreement.

### III. Summary of ESIP Related Directives

The law authorizes the Division to adopt expedited rules to implement ESIP related issues. Until that process is completed, the Division is authorizing several implementation directives to permit ESIP work to begin.

In addition, there are several statutory inconsistencies in two sections of law that when read without context are contrary to the intent of the law. Specifically, this refers to the third and fourth sentences in paragraph (c)(4) of sections 1 and 6 of the law. To be consistent with the statute, both of these sections should be read as follows (deletions shown as ~~bold strikeouts~~, new text, **bold, underlined**).

“Notwithstanding any law to the contrary, lease-purchase agreements and energy savings ~~certificates~~ **obligations** shall not be excepted from any budget or tax levy limitation otherwise provided by law. Maturity schedules of lease-purchase agreements or energy savings obligations must **not** exceed the estimated useful life of the individual energy conservation measures.”

Combining all elements in this Notice together, the following matters shall be treated as directive in nature pending adoption as a rule:

- A. The “competitive contracting” process (N.J.S.A. 40A:11-4.1 et seq and 18A:18A-4.1 et seq and rules at N.J.A.C. 5:34-4.1 et seq.) may be used by local units to procure ESCO services.
- B. The energy audit for a facility must be completed prior to issuing a Request for Proposals for an ESCO and must be made available to firms as part of an RFP.
- C. Organizations involved in an energy audit cannot be hired by an ESCO to assist in the development or implementation of an ESIP. They can be hired by the local unit to verify the Energy Savings Plan or verify commissioning.
- D. Approval is granted for a “compressed” Request for Proposals process for ESCO services, where the RFP is advertised without the required energy audit being available at the outset, but the due date for submission of proposals shall not be sooner than at least 20 days from the time the audit is made available; and that as soon as the audit is available, it shall be provided to all potential proposers.
- E. The third and fourth sentences of paragraph (c)(4) of sections 1 and 6 of Chapter 4, [N.J.S.A. 18A:18A-4.6(c)(4) and 40A:11-4.6(c)(4)] shall be read as follows:  
 “...Notwithstanding any law to the contrary, lease-purchase agreements and energy savings obligations shall be excepted from any budget or tax levy limitation otherwise provided by law. Maturity schedules of lease-purchase agreements or energy savings obligations must not exceed the estimated useful life of the individual energy conservation measures.

#### IV. Conclusion

New Jersey’s approach to paying for capital intensive energy improvements through savings is different from other states. It takes into account international standards, independent verification, and provides the “do-it-yourself” alternative to the traditional ESCO approach, as well as taking into account the State’s public works construction environment. This approach provides local units more flexibility in considering how to undertake energy and water conservation improvements to their facilities.

Local units should carefully consider their options and not make a decision based on one vendor’s representation. Due diligence, backed up by a reliable energy audit, a competitive vendor procurement process, and a commitment to maintaining the system once it is installed are keys to maximizing energy efficiency and keeping costs low and energy savings high. Local officials should take advantage of seminars and the forthcoming model documents to assist in planning their conservation efforts and keep aware of ongoing changes and developments in the field.

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Approved: Susan Jacobucci, Director

#### Table of Web Links

Page	Shortcut text	Internet Address
2	BPU Local Government Energy Audit Program	<a href="http://www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit">www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit</a>
2	BPU CleanPower Community Partners Program	<a href="http://www.njcleanenergy.com">www.njcleanenergy.com</a>
2	Sustainable Jersey Program	<a href="http://www.sustainablejersey.com/">www.sustainablejersey.com/</a>
2	Office of Clean Energy	<a href="http://www.njcleanenergy.com">www.njcleanenergy.com</a>
3	State Division of Property Management and Construction	<a href="http://www.state.nj.us/treasury/dpmc/">www.state.nj.us/treasury/dpmc/</a>
4	NJ Division of Property Management & Construction	<a href="http://www.state.nj.us/treasury/dpmc/">www.state.nj.us/treasury/dpmc/</a>

5	Muni/Local Gov Energy Audit Program Contract	<a href="#">T-2545</a>
5	Office of Clean Energy website	<a href="http://www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit">www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit</a>
11	Local Finance Notice 2009-10	<a href="http://www.nj.gov/dca/lgs/lfns/09lfns/2009-10.doc">www.nj.gov/dca/lgs/lfns/09lfns/2009-10.doc</a>
12	School Debt Issues	<a href="http://www.state.nj.us/education/facilities">www.state.nj.us/education/facilities</a>

**APPENDIX A****TYPES OF ENERGY CONSERVATION MEASURES (ECMs)**

1. Boiler Plant Improvements, such as, but not limited to boiler control improvements upgrade of natural-gas-fired boilers with new controls
2. Chiller Plant Improvements, such as, but not limited to chiller retrofits or replacements
3. Building Automation Systems / Energy Management Control Systems (EMCS), such as, but not limited to:
  - HVAC upgrade from pneumatics to Direct Digital Control
  - Upgrade or replacement of existing EMCS systems
4. Heating, Ventilating, and Air Conditioning (HVAC, not including boilers, chillers, and BAS/EMCS) such as, but not limited to:
  - packaged air conditioning unit replacements HVAC damper and controller repair or replacement
  - replacement of air conditioning and heating units with heat pumps
  - window air conditioning replacement with high efficiency units cooling tower retrofits or replacements
  - economizer installation
  - fans and pump replacement or impeller trimming thermal energy storage
  - variable air volume (VAV) retrofit
5. Lighting Improvements, such as, but not limited to interior and exterior lighting replacements lighting control improvements, occupancy sensors installation, LED exit sign installation, daylighting.
6. Building Envelope Modifications, such as, but not limited to insulation installation, weatherization window replacement, and reflective solar window tinting
7. Chilled Water, Hot Water, and Steam Distribution Systems, such as, but not limited to piping insulation installation, hot water heater repair and replacement steam trap repair and replacement
8. Electric Motors and Drives, such as, but not limited to motor replacement with high efficiency motors variable speed motors or drives
9. Refrigeration, such as, but not limited to replacement of ice/refrigeration equipment with high efficiency units
10. Distributed Generation such as, but not limited to cogeneration systems installation microturbines installation, fuel cells installation
11. Renewable Energy Systems, such as, but not limited to photovoltaic system installation, solar hot water system installation, wind energy system installation, passive solar heating installation, alternatively fueled vehicle refueling station installation
12. Energy/Utility Distribution Systems, such as, but not limited to transformers installation power quality upgrades power factor correction, and gas distribution systems installation
13. Water and Sewer Conservation Systems, such as, but not limited to installation of low-flow showerheads, installation of low-flow plumbing equipment, installation of water efficient irrigation, and installation of on-site sewer treatment systems
14. Electrical Peak Shaving/Load Shifting, such as, but not limited to thermal energy storage, gas cooling
15. Energy Cost Reduction Through Rate Adjustments, such as, but not limited to recommendations for change to more favorable rate schedule, recommendations for Government negotiation of

lower rates, same supplier, or recommendations for lower energy cost supplier(s) (where applicable) energy service billing and meter auditing recommendations

16. Energy Related Process Improvements, such as, but not limited to production and/or manufacturing improvements recycling and other waste stream reductions
17. Commissioning, such as but not limited to retro-commissioning services continuous commissioning services