FCIP FAQs

FCIP is a program operated by the Kansas Energy Office,
a division of the Kansas Corporation Commission (KCC)

How is energy performance contracting different from conventional approaches to replacing energy equipment?

Energy performance contracting involves a single procurement contract with an energy service company (ESCO) that covers everything from initial design and engineering through installation, startup, and measurement and verification of outcomes for multiple energy systems and buildings.

In a conventional approach to replacing energy equipment, multiple contracts and often multiple firms may be involved in designing a project and purchasing, installing, and commissioning equipment. Even under a design/build contract, which integrates these processes under a single company, once the project has been accepted the long-term operational risk lies with the customer.

Energy performance contracting identifies guaranteed energy savings sufficient to pay for all costs associated with implementing the project (i.e., equipment, materials, labor, fees, bonds, permits, and debt service) during the time the project is financed. If, by fault of the ESCO, the guaranteed energy savings are not achieved, the ESCO must reimburse you the difference.

How do I get started?

Contact the Kansas Energy Office at 785-271-3190. FCIP staff in the Energy Office will provide a general overview of the FCIP process, direct you to some fundamental resources, and answer questions. FCIP staff can make a presentation to your governing body or management, if desired, to explain and answer questions about the program, the benefits, details of how to participate, costs, and so on.

What happens next?

FCIP staff can arrange for a walk-through of your facility by multiple pre-qualified ESCOs of your choosing to conduct a preliminary audit. You would be required to provide, in advance, 36 months of utility bills, floor plans, and a completed Customer Data Sheet describing your facilities and energy equipment. The ESCOs tour the site, and based on their observations and the data previously provided, develop preliminary proposals of improvements to be made. FCIP staff can schedule a meeting for the proposals to be presented, after which you select a single ESCO to work with if you choose to proceed.

Alternatively, you already may have been approached by an ESCO, been provided with its preliminary proposal, and decided it is the company with which you want to work. Although we encourage you to have multiple ESCOs perform a preliminary energy audit and present their findings before you select one ESCO to perform an in-depth Investment Grade Audit (IGA) of your facility, you are not required to do so.

There is no cost or commitment associated with preliminary energy audits. In the FCIP you have no obligation to an ESCO until both of you have signed an Investment Grade Audit Agreement (IGAA) and the Agreement has been reviewed and signed by the KCC.

What is an IGAA? How is that different from an IGA?

The IGAA is a standardized contract between you and an ESCO. It is a formal agreement for the ESCO to conduct an exhaustive review of your property to identify feasible energy cost and operational savings, and present those findings in a report.

The IGAA spells out the process that will be followed in conducting the audit, including but not limited to:

- How the audit will be conducted and the factors the ESCO must assess,
- Your role and responsibilities during the audit,
- The cost of the audit,
- How energy costs and savings are determined,
- How compliance with payback requirements is calculated,
- The process for presenting findings for your feedback and consideration, and
- A standardized format and content for the audit report.

The IGA is an exhaustive review (audit) of the energy systems of a facility that results in a written assessment of the energy efficiencies and cost savings that can be achieved through performance contracting. The purpose of an IGA is to determine whether it will be cost-effective to enter into an Energy Performance Contract (EPC) to install and implement energy cost-saving equipment and measures, as well as to document pre-project conditions, consumption, and other variables that could impact project outcomes.

During an IGA the ESCO will assess your current energy systems, such as HVAC equipment and controls, lighting (indoor and outdoor), insulation, general air quality, and water-consuming systems. ESCO staff also will review such factors as hours of occupancy of various parts of the facility, comfort and maintenance problems, current temperature settings, your priorities for improvements, and your future plans for equipment replacement or building renovations.

Based on the review, the ESCO will generate a list of potential cost savings that could be achieved by installation of new equipment, changes in operations and maintenance practices, building infiltration improvements, and the like. Calculation of the possible savings is based on a comparison of current usage and costs (baseline) to estimates of usage and costs after installation of new, energy-efficient equipment and changes in practices.

The IGA Report is the written culmination of the work carried out during the audit. It contains a review of your facility and energy systems, an analysis of your utility usage, a proposal for energy improvements including a preliminary cash flow analysis, implementation and commissioning plans, and a plan for measuring energy savings after implementation. The IGA Report contains the information you will need to make your decision about whether to go forward with an Energy Performance Contract. You may or may not decide to implement the changes identified by the ESCO, but unless the ESCO is unable to identify a viable project in accordance with Sec. 4.6 of the IGAA, you will be charged a fee for this thorough review of your energy systems.

So do we (the Customer) just sit back and let the ESCO do it all?

No. One hallmark of a successful project is creation of an internal team to work with the ESCO during reviews of your systems (and during implementation if an EPC is entered into), including staff representing maintenance/engineering, finance, and administration. This team, along with FCIP staff, will hold several formal meetings with ESCO staff during the course of the IGA to receive progress updates, address questions and concerns, and clarify issues. Your staff also will work with the ESCO on a more informal basis throughout the process. FCIP staff provide third-party oversight and guidance during the project period (from the initial audit through measurement and verification).

What types of energy improvements can be made?

Virtually any type of improvement which increases energy efficiency and cost savings is potentially allowable under FCIP. The key is to develop a “package” of improvements that, taken together, meet payback requirements. That is, the improvements, as a group, must reduce energy usage and costs from current levels enough to generate sufficient guaranteed energy savings to pay for the total cost of the improvements (including financing) within the time period the project is financed, not to exceed 30 years. In addition, the project must be budget neutral in each year of financing; each year the guaranteed energy savings must be sufficient to cover debt service on the project.

Common improvements include, but are not limited to, the following:

- Replacement of lighting lamps and ballasts with LEDs
- Energy management systems
- Chiller and boiler replacements
- Building insulation and other building envelope improvements
- High-efficiency motors and variable-frequency drives (VFDs)
- Rooftop HVAC replacement

Window and roof replacements tend to be difficult to include in a package because they are costly items that typically save little energy relative to their cost, resulting in a long payback. Similarly, renewable systems such as solar panels and wind turbines can be difficult to include, due to the high cost of those systems relative to the electricity or gas purchase they offset during the time period the project is financed.

A package that successfully meets payback requirements will generally include fast-payback improvements such as lighting and energy management systems that can offset long-payback items such as replacement of rooftop HVAC units or boilers.

What types of improvements or savings cannot be included in an FCIP project?

Savings from reduction in water usage are not included in the Kansas statute governing performance contracting, which is limited to energy and operational cost savings.

Water-saving devices that reduce energy use (e.g., electricity or gas) might be included in a package of improvements, but only the reduction in energy usage would be considered in the calculation of savings, not the value of the water saved.

Enhanced revenues also do not count as savings for purpose of determining whether a project meets payback requirements. If a project undertaken to enhance revenue (such as meter replacement) also results in energy savings, only the energy savings would be included in calculating payback.

Because the energy savings is low compared to the costs associated with replacement of water-using fixtures and revenue enhancement projects, these are not commonly included in FCIP packages of improvements.

Finally, FCIP does not allow the cost of new equipment to be counted as savings (referred to by some as "avoided capital cost"). Replacing a major piece of equipment now as part of a performance contract, rather than some years later, simply moves the expense forward in time. The capital cost is neither "avoided" nor "saved".

How is the project financed?

It is up to you to secure financing; the FCIP does not fund projects. Typically, the up-front money for a project comes from bond proceeds or bank loans, which are sometimes supplemented with accumulated capital outlay monies or other savings. In addition, some ESCOs may have financing divisions. Many projects are set up as lease-purchase arrangements.

Although exact financing costs may not be known until you are ready to sign an Energy Performance Contract, it is important to involve your prospective finance agent early in the process so as to be able to secure accurate estimates at every stage of the process of the likely interest rate that will be charged, or a range of the likely interest rates. The cost of financing is included in the total cost of the project when determining whether payback requirements are met, so it is necessary to have realistic estimates of financing costs when considering the various packages of energy improvements you might make.

Please explain more about payback requirements, and what happens if my project doesn't meet them.

In FCIP, a project must be able to pay for itself from guaranteed energy and guaranteed operational cost savings within the number of years it is financed, up to a maximum of 30 years. In addition, it must be budget neutral in each year. This is referred to as the payback requirement.

The number of years it will take a project to pay for itself is calculated as the total project cost (regardless of funding source) divided by the guaranteed savings in the first year of the project. The total project cost includes financing costs, but excludes the FCIP fee. Using funds on hand to pay for part a project does not change the total project cost, except to the extent it reduces financing costs.

FCIP recognizes that energy and maintenance costs typically increase over time, so the program allows a reasonable escalation rate to be built into cash flow projections (see IGAA Section 5.1.3.1). An escalation rate increases the dollar savings associated with a fixed amount of energy saved. An escalation rate does not affect the initial determination of the number of years it will take a project to pay for itself because that calculation uses only the guaranteed first year energy savings. However, it may help your project meet the requirement to be budget neutral each year if your debt repayment is structured to increase annually rather than remain level each year, or if your project includes some improvements for which the expected equipment life is shorter than the overall project financing period.

Estimated payback periods should be calculated for each potential package of energy improvements under consideration, beginning during the IGA process and continuing through development of the Energy Performance Contract when financing costs will be finalized.

Projects packages that do not meet the payback requirement cannot go forward in FCIP, and will require restructuring of the package of individual improvements until the requirement is met. If final financing rates are higher than estimated and would result in the project not meeting the payback requirement, either the package of improvements must be restructured further or the project will have to be conducted outside of FCIP. In the latter case, your legal staff should be consulted to determine whether the project can proceed or whether it must begin anew in compliance with local procurement requirements.

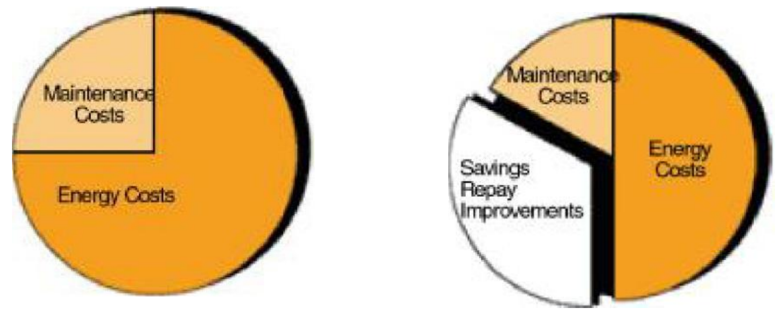
How can the project pay for itself, since it doesn't generate revenue?

Energy performance contracting involves reallocating money already in the utility budget to purchase efficiency and capital improvements. The money that is anticipated to be budgeted for utilities year after year is repurposed to repay borrowed funds used to replace failing or inefficient systems AND to pay the utility bills for lower usage. There should be no budget impact beyond what would have been spent for utilities and operations and maintenance (O&M) if no changes had been made to equipment or operations.

Typically, the cost of energy increases over time, so even if your utility usage didn't change, your utility budget would increase over time as the cost of energy increases. Energy performance contracting increases efficiency to reduce your utility usage, making your utility costs lower than they otherwise would have been. The term "energy savings" refers to the reduction of a cost (utility bill) that, without any action, you would expect to continue and increase over time.

The charts below demonstrate how energy performance contracting impacts building operating costs. Remember, performance contracting assumes you will continue to fund utility costs in your budget each year during the financing period AS IF none of the improvements had been made, so that the energy savings can be used to make debt service payments.

Before Improvements **After Improvements**



What does the term "guaranteed energy savings" really mean? How does it work?

The ESCO will calculate the reduction in energy usage and O&M expenses it anticipates will be achieved by implementing the project. *Energy usage is measured in units such as kWh of electricity or mcf of gas, which are converted to dollars based on the rates/unit applied.* The ESCO will report both the reduction it <u>anticipates</u> will be achieved, and the reduction it <u>guarantees</u> will be achieved, typically 90% – 95% of the anticipated reduction. If you do not achieve the guaranteed reduction in usage of energy units in any year (after adjustments for weather, occupancy, etc.), the ESCO is required to pay you the difference between the guaranteed reduction and your actual reduction in usage* for that year.

FCIP requires all projects to include a minimum of three consecutive years of measurement and verification (M&V) of outcomes, although you may choose to contract for a longer term at an additional cost. M&V is the scientific process of quantifying the energy and cost savings resulting from improvements in the energy-consuming systems, as well as in the associated operations and maintenance activities. M&V activities include, but are not limited to, metering electrical consumption, engineering calculations, and measuring and documenting changes in operational costs. Stipulation (simply agreeing usage or cost have been decreased by a certain amount due to installation of more efficient equipment or improved practices) is NOT an M&V method, and any saving to which you agree to stipulate will not be counted as guaranteed for purposes of determining whether a project meets payback requirements.

M&V is discussed in depth in the FCIP Guidance Manual. If you choose not to continue M&V after the mandatory three consecutive years of meeting or exceeding the guaranteed savings, it may be difficult to assess whether those savings continue to be achieved. However, once initial energy savings have been confirmed for three consecutive years of operation, a more streamlined M&V approach for the following years may be justified.

* The Energy Performance Contract spells out your responsibilities in achieving energy reductions, such as conducting required maintenance on the equipment, complying with agreed upon thermostat settings and hours of usage of the facilities, etc.

How do I find an ESCO?

The State of Kansas has established a state contract for ESCOs participating in FCIP. The KCC maintains on its website a list of these pre-qualified ESCOs and their contact information. If you are in FCIP, you must select an ESCO from the pre-qualified list. We encourage you to participate in the preliminary audit process which will provide exposure to a number of different ESCOs. You are likely to have a multi-year relationship with the ESCO if you go forward with a project, so it's important to select one that shows potential for a satisfactory long-term relationship. While the FCIP has made every effort to ensure the pre-qualified ESCOs are capable and experienced, we cannot be held liable for the performance of any participant, project, or measure.

Can I do this without the KCC?

Yes. Kansas law (K.S.A. 75-37,125) allows political subdivisions and state agencies to contract directly with an ESCO without participating in FCIP. However, if you don't participate in FCIP, you may need to follow the contracting process applicable to your locality or district, including developing an RFP for the project, evaluating bids, selecting an ESCO (which could include, but is not limited to, the ESCOs on the State's pre-qualified list), developing contracts, and monitoring the project. In addition, State agencies are required to submit copies of their plans for energy conservation improvements to the KCC for review, and cannot enter into a contract for such measures unless they have been approved by the KCC.

Why does FCIP charge a fee? What services does it provide?

K.S.A. 75-37,125(e) authorizes the KCC to charge reasonable fees for any services provided under FCIP. You will enter into a Memorandum of Understanding (MOU) with the KCC to gain access to FCIP services; however, no fee is charged unless you decide to proceed with an energy performance contract upon completion of an investment grade audit. The MOU and fee structure are included on the website.

The services provided by FCIP staff fall into two major areas:

Administrative streamlining. FCIP has developed:

- A state contract for ESCOs participating in FCIP, which allows program participants to select an ESCO from the pre-qualified list without having to go out for bid. The state contract sets performance standards for ESCOs and specifies the maximum rates each ESCO can charge for overhead and profit, and for the IGA.
- Standardized contracts for the Investment Grade Audit Agreement and the Energy Performance Contract, which significantly reduce the demand on your legal staff. The contracts spell out in detail the scope of work ESCOs must perform, and set standards for an ESCO's interactions with you and for its work product.

Support and oversight. With your best interests in mind, the FCIP staff:

- Provide guidance and insight about how the program may work most effectively for you.
- Answer questions and act as a sounding board.

- Attend meetings with your governing body as needed, as well as your meetings with the ESCO when appropriate.
- Review and provide written feedback to you on the IGAA, the IGA Report, and the EPC to:
  - Ensure the documents comply with statutory and program requirements,
  - Assess technical documents for reasonability, and
  - Advise you of any concerns with the proposal.
- Help ensure ECSOs fulfill their contractual requirements.

The FCIP does NOT direct or influence your selection from the pre-qualified ESCO list, does not act as a project manager or construction manager, is not a party to the IGAA or the EPC, and does not act as legal counsel.