COMMERCIAL NEW CONSTRUCTION PROGRAM

It pays to make energy efficiency part of the plan.
COMMERCIAL NEW CONSTRUCTION PROGRAM

Make energy efficiency part of your next design. The Commercial New Construction program provides complimentary energy design assistance and financial incentives to help offset the cost of implementing energy-efficient strategies.

TO QUALIFY, YOUR PROJECT MUST BE:

- New construction, an addition or major renovation with a mechanical system replacement.
- Larger than 5,000 square feet.
- Heated and/or cooled using electricity or natural gas provided by a sponsoring utility.
- At a point in the design process to implement results of the energy analysis.
AS A PROGRAM PARTICIPANT YOU WILL:

RECEIVE COMPLIMENTARY ENERGY DESIGN ASSISTANCE
With the Commercial New Construction program, a customized energy model simulates energy use for your project, demonstrating which efficiency strategies have the biggest impact and which are most cost-effective. Strategies are selected by the owner and design team with the assistance of an energy design consultant.

STUDY ENERGY EFFICIENCY STRATEGIES
Energy-saving strategies that may be studied include a wide variety of systems such as daylighting controls, envelope design, heating and cooling, lighting controls and design, load-responsive equipment, outside air control, window glazing and window layouts.

QUALIFY FOR CONSTRUCTION AND DESIGN INCENTIVES
Construction incentives are paid to the building owner to reduce the first costs of energy-saving strategies. These incentives are based on the electric and natural gas savings modeled and verified as installed. Design team incentives are paid to the building designer or architect to help offset the cost of program participation.

EARN CONTINUING EDUCATION CREDITS
Participation in the Commercial New Construction program is approved for 3.5 GBCI CE Hours for LEED® Professionals through The Weidt Group as a USGBC Education Provider.

For questions regarding the Commercial New Construction program, contact The Weidt Group at 877-939-1874.
All program costs and incentives are funded by the following utilities. To apply, complete the screening form found on the partnering utility’s website.

AlliantEnergy.com/NewConstruction
MidAmericanEnergy.com/iowa_CNC
blackhillsenergy.com/iowa_cnc
<table>
<thead>
<tr>
<th>Track</th>
<th>Square Footage</th>
<th>Minimum Energy Savings*</th>
<th>Project Description</th>
<th>Services</th>
<th>Design Team Incentive</th>
<th>Construction Incentive per kWh/therm saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>5-15k</td>
<td>5%</td>
<td>Small Buildings</td>
<td>One meeting: building systems optimization for one to three systems (depends on building complexity); implementation verification.</td>
<td>$1,000</td>
<td>$.06-$1.90/kWh $.60-$1.90/therm</td>
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<tr>
<td>II</td>
<td>&gt;15k</td>
<td>5%</td>
<td>Standard Efficiency Strategies</td>
<td>Two meetings: building systems optimization based on mechanical system selection; implementation verification.</td>
<td>$3,500</td>
<td>$.06-$1.90/kWh $.60-$1.90/therm</td>
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<tr>
<td>III</td>
<td>&gt;15k</td>
<td>5%</td>
<td>Custom Efficiency Strategies</td>
<td>Three meetings: building systems optimization for two complex mechanical systems; implementation verification.</td>
<td>$5,500</td>
<td>$.06-$1.90/kWh $.60-$1.90/therm</td>
</tr>
<tr>
<td>IV</td>
<td>&gt;15k</td>
<td>40%</td>
<td>Advanced Custom Efficiency Strategies</td>
<td>Four+ meetings: goal setting with module options of massing, daylighting and HVAC analysis; building systems optimization for four complex systems; certification support of LEED EA Optimize Energy Performance or ENERGY STAR®; implementation verification.</td>
<td>$6,500 (one module) $7,500 (two modules) $8,500 (three modules)</td>
<td>$.06-$1.90/kWh $.60-$1.90/therm</td>
</tr>
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*Percent savings better than state energy code baseline
INCENTIVES

ENERGY DESIGN CONSULTING
Energy design consulting through whole-building energy modeling is provided for each project at no cost to the owner by their utility through energy efficiency programs.

DESIGN TEAM INCENTIVE
A design team incentive is provided to the owner’s team of professionals assisting in the Commercial New Construction program to help offset expenses associated with program participation. The design team payment is a one-time lump sum amount paid to the design team lead and is based on the program track.

CONSTRUCTION INCENTIVE
Incentives are provided to the building owner based on electric and natural gas savings modeled and verified upon construction completion to reduce the first cost of the energy-saving strategies. Incentives are offered starting at 6 cents per kWh and 60 cents per therm saved at the level of 5 percent better than the Iowa state energy code baseline. Incentives climb to 19 cents per kWh and $1.90 per therm saved at 60 percent better than the baseline. Incentives cannot reduce overall payback to less than one year.
A CLOSER LOOK AT TRACK OPTIONS

The Commercial New Construction program offers four program tracks to meet the needs of various project types. The program also accommodates volume build projects in any track and each building may be eligible for a construction incentive. Renovations may be eligible to participate in the Commercial New Construction program when two major building systems are being replaced; one of those systems must be mechanical.
TRACK I
FOR SMALL BUILDINGS

Track I is a one-meeting process that offers a streamlined and fast, energy design-assistance solution for certain building types 5,000 square feet to 15,000 square feet. Track I evaluates up to three mechanical system types plus 40 to 60 other energy efficiency strategies from insulation and windows to lighting, lighting controls, heat recovery and more. Track I participants must achieve savings of at least 5 percent better than the state energy code baseline.

IOWA CITY FIRE STATION #2

Iowa City Fire Station #2 is an 11,000 square foot replacement building nearly four times larger than the original facility. Due to the necessary increase in building size, ongoing operation costs and first costs were a concern. Through the Commercial New Construction program, the project team learned how systems and design affect future energy needs and was able to identify cost savings.

PROJECT SAVINGS OF $14,500 IN ANNUAL ENERGY COSTS
CONSTRUCTION INCENTIVE OF $22,700 FROM THE UTILITY

* When compared with minimum state energy code baseline
MOBILE TRACK SOLUTIONS

Mobile Track Solutions LLC manufactures construction-grade machines used primarily to move earth. The energy expended is something that the company monitors rigorously. When it came time to build a new facility, Mobile Track Solutions utilized the Commercial New Construction program to analyze a range of energy-efficient options. The end result—and a key part of this 49,400 square foot project—was the technologically advanced baghouse filtration system and exhaust recovery.

PROJECT SAVINGS OF $54,000 IN ANNUAL ENERGY COSTS
CONSTRUCTION INCENTIVE OF $94,937 FROM THE UTILITY

*When compared with minimum state energy code baseline

TRACK II

FOR STANDARD EFFICIENCY STRATEGIES

Track II includes up to two meetings and offers energy design assistance to buildings larger than 15,000 square feet—or those not appropriate for Track I. This track evaluates more than 70 energy efficiency strategies during the building design. Track II is a good option for both fast-track and longer timeframe projects that are still in the design phase and have uncomplicated space configurations. This track also can accommodate designs where the mechanical system type has already been selected. Track II participants must achieve savings of at least 5 percent better than the state energy code baseline.
TRACK III
FOR CUSTOM EFFICIENCY STRATEGIES

Track III is a three-meeting process for buildings larger than 15,000 square feet with complicated space configurations. Track III is a good option for teams interested in evaluating two different types of mechanical systems and determining efficiency levels for each. Approximately 150 customized energy efficiency strategies can be evaluated during the building design. The results of this energy modeling include energy cost, payback, savings and incentives, and are available to the design team and owner as value-added information to assist in guiding final design selections. Track III participants must achieve savings of at least 5 percent better than the state energy code baseline.

HISTORIC PARK INN

The last remaining hotel designed by Frank Lloyd Wright, the Historic Park Inn Hotel, was undermined by its slow degradation. The nonprofit organization, Wright on the Park, worked diligently to successfully restore the 37,300 square foot hotel for almost a decade. Along the way, strategies suggested by the Commercial New Construction program were balanced with historic preservation.

PROJECT SAVINGS OF $24,900 IN ANNUAL ENERGY COSTS*
CONSTRUCTION INCENTIVE OF $31,125 FROM THE UTILITY

*When compared with minimum state energy code baseline
For projects larger than 15,000 square feet with high energy-savings goals, Track IV offers design teams who are interested in additional consulting services the following early design-assistance module options to help achieve those goals:

- **Massing Analysis** offers comparison of up to four alternate massing and orientation options to maximize energy efficiency. Learn which building shape uses the least amount of energy, how building configuration affects daylighting performance and how building form affects mechanical system selection.

- **Daylighting Analysis** offers an energy-centric comparison of alternate window configurations and sun shading devices. Learn which options provide the most daylight with minimal glare throughout most of the occupied hours of a space and how to balance daylighting needs with heating and cooling penalties.

- **HVAC Analysis** is a life-cycle cost comparison of up to four different mechanical systems. Learn which mechanical system provides the maximum energy savings with the lowest potential cost over the lifespan of the system. Estimated system first costs, replacement costs and maintenance costs for each system are reviewed alongside projected annual energy costs. This is the only Track IV early-design module that is required for track participation.

Track IV participation requires a goal of 40 percent better than the state energy code baseline. A free goal-setting meeting is provided to establish the potential to obtain that goal. Projects on track for 40 percent may continue. Projects not targeting 40 percent energy savings may continue in the program through another track.

**BONUS:** Achieve 40 percent savings and be eligible to receive free certification submittal support for LEED EA Optimize Energy Performance or ENERGY STAR®.
DYERSVILLE ELEMENTARY SCHOOL

West Dubuque Community School District used all three modules of Track IV to assist in their decision-making process for the new Dyersville Elementary School.

Several massing schemes were studied during the Massing Analysis module, each with different daylighting potential. It was found that changing the orientation from a north-entrance “T” plan to a more east-facing “Y” plan created a significant change in energy use. In the end, a modified version of both was chosen creating a balance among energy efficiency, cost, program considerations and occupant comfort.

Utilizing the Daylighting Analysis module, the project team analyzed various window sizes and locations to determine which options provided good uniform daylighting without negatively impacting the learning environment. In the final design, a north-facing clerestory provided even, diffused light to the classroom spaces while vision windows with manual blinds provided views to the outside.

The HVAC Analysis module provided comparative analysis of four different mechanical systems to assist the school district in balancing the budget and the needs of their community. The final system selected was a combination of water-to-air ground-source heat pumps with chilled beams in the classroom, resulting in both annual energy cost savings and the lowest life-cycle cost.

PROJECT SAVINGS OF $67,700 IN ANNUAL ENERGY COSTS
CONSTRUCTION INCENTIVE OF $132,173 FROM THE UTILITY

*When compared with minimum state energy code baseline