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SITTONTM
ENERGY SOLUTIONS

*Maximizing Facility Value
... Minimizing Facility Cost*

Energy Efficiency & Retro-Commissioning (RCx)



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Sitton Energy Solutions

- Independent consulting firm specializing in energy efficiency
- Ameren ActOnEnergy® Trade Ally and Retro-Commissioning Service Provider in MO & IL
- Some of our services:
 - Retro-Commissioning (RCx)
 - Energy Audits/Assessments
 - Building/LEED Commissioning
 - Energy Management
 - Identifying & Securing Incentives
 - Facility Assessments



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SINCE JULY 2007, WE
HAVE HELPED OUR
CLIENTS SAVE:

\$20,284,158.73

REDUCED
GREENHOUSE GAS
(LBS. OF CO₂)
EMISSIONS:

57,816,765.11



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Why Energy Efficiency

- **Environment - Clean Power Plan**
 - By 2030, reduce carbon dioxide emissions by 30% from 2005 levels
 - Missouri – 21%
 - Illinois – 33%
 - How?
 - **Energy efficiency**
 - Renewable energy
 - Less carbon-intensive fuels
 - More efficient use of fossil fuels at existing plants



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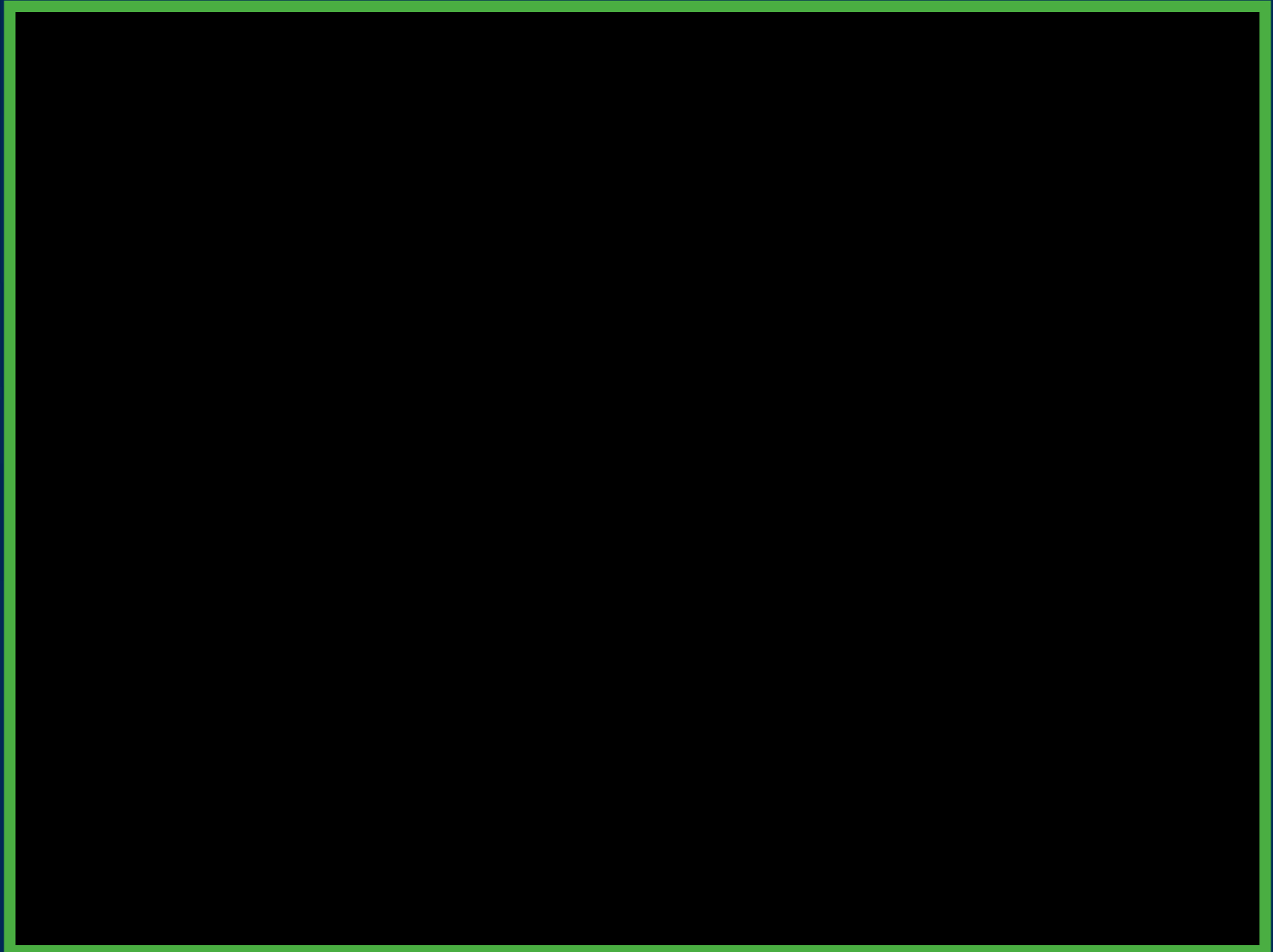


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Why Energy Efficiency





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Why Energy Efficiency

*“The cheapest energy
is the energy you don’t
use in the first place”*

- Sheryl Crow



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Why Energy Efficiency

- **Economic**

- Energy efficiency is a vast, low-cost energy resource for the US economy
- Potential to reduce annual energy consumption by 23% by 2020
- \$1.2 trillion in savings
- \$520 billion in costs
- Abatement of 1.1 gigatons of greenhouse gas emissions annually



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*McKinsey & Company Report



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Why Energy Efficiency

“Energy efficiency is the most exciting technology you’ve never seen”

-Elaine Adams, Rocky Mountain Institute



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Common Energy Efficiency Options

- Building Envelope Improvements
- Equipment Replacements & Mechanical Upgrades
- Lighting Audits
- Retro-Commissioning (RCx)



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Incentive Program Types

- Standard or Prescriptive
- Custom
- New Construction
- Retro-Commissioning



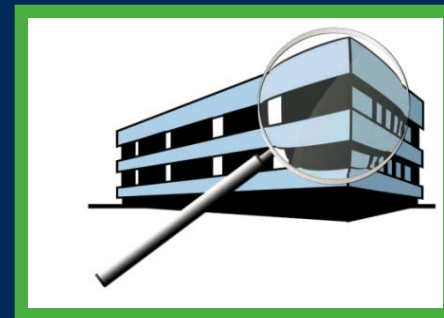
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What is Retro-Commissioning?

- Systematic discovery, documentation, review, and improvement of energy operations through **no-cost or low-cost** saving opportunities that match building performance to current functional requirements
- Process to improve the efficiency of an existing building's equipment and systems
- “Existing Building” Cx
- Not a lighting audit
- Not equipment replacements



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RCx Benefits

- Reduced:
 - Utility costs
 - Operation and maintenance costs
 - Repairs and system downtime
- Increased:
 - Equipment life
 - Occupant comfort
 - Staff productivity
 - Building value
- Improved:
 - Indoor air quality
 - Building documentation



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Common RCx Improvements

- Optimize equipment operating schedules
- Implement reset strategies
- Reduce outside air in over-ventilated areas
- Modify control sequences
- Optimize chiller and boiler operation to match building loads
- Eliminate simultaneous heating and cooling
- Fix improperly functioning devices
- Modify occupied and unoccupied setpoints



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RCx Financial Results

Sitton RCx Projects

Total Square Footage	4,296,846
Number of Projects	17
Survey & Implementation Costs	\$2,419,640
Annual Energy Savings	\$2,068,429
Incentives	\$1,288,548
Simple Payback (Months)	6.6



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Annual Rate of Return = 183%



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How Do We Get Started?

- **Sitton Energy Solutions** wants to give companies and organizations the best direction to achieve their energy efficiency and sustainability goals.



Retro-Commissioning earns you 5 points under Scorecard Item E1.5 in the GBC, and can also help you earn additional points under the Energy category.



ENERGY STAR assistance
LEED EBOM
HPBI



Incentive Opportunities



Financing Opportunities



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How Do We Get Started?

- Preliminary Information
 - Gas & Electric Usage and Costs
 - Building Square Footage
 - BAS Coverage
- We will – **at no cost** – determine your energy use intensity (EUI), program eligibility, and potential savings and incentive opportunities



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