

ENERGY EFFICIENCY, COST SAVINGS, & GREEN LENDING

TECHNOLOGY & GREEN ISSUES



WELCOME TO THE WEBINAR!

GET TO KNOW THE PANELISTS



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THE CURRENT ENERGY MARKET

WHERE ARE WE AT TODAY

- Finding savings is critical!
- Throughout 2020, prices were at historic lows. We saw savings of up to 20% on electric and natural gas, but prices are now rising.
- Prices are a result of a combination of historically warm winter months and the Coronavirus reducing both commercial and industrial demand for energy products.
- Prices are "Volatile" changes week to week.
- Leverage your position. The opportunity and cost savings of low pricing will not last – like the Stock Market.



DECLINING COST OF GREEN ENERGY

CLEAN ENERGY OPTIONS



Renewable electricity costs have fallen sharply over the past decade, driven by improving technologies, economies of scale, increasingly competitive supply chains and growing developer experience.

Since 2010, the cost for construction of utility-scale solar photovoltaics (PV) power has declined by 82%, followed by concentrating solar power (CSP) at 47%, onshore wind at 39% and offshore wind at 29%.

Costs for solar and wind power technologies also continued to fall year-onyear.

- Electricity costs:
 - Utility-scale solar PV fell 13% in 2019
 - Global average of 6.8 cents (USD 0.068) per kilowatt-hour (kWh).
- Onshore and offshore wind both declined about 9%
 - Onshore USD 0.053/kWh
 - Offshore USD 0.115/kWh



GO GREEN, SAVE GREEN

ENERGY EFFICIENCY PROJECTS

"Define a repeatable sustainability process for ongoing projects for your organization."

Creating a strategy that reduces your carbon footprint and increases energy efficiency is a multi-pronged approach that requires detailed planning and execution.

- 1. **Identify** Benchmark energy usage across the organization and individual properties to determine the "current state" and prioritize "the energy hogs".
- **2. Reduce** Audit the property and develop a list of engineered Energy Conservation Measures (ECM's) that will <u>cost-effectively</u> impact the organization's energy consumption.
- 3. Finance Energy engineering can power the organization's bottom line through creative financing and rebate options that eliminate the need for upfront capital while simultaneously increasing positive cash flow.

CURRENT STATE OF ENERGY EFFICIENCY

TOPICS TO BE DISCUSSED

Reduce utility spend by up to 30% a year.

During uncertain economic climates, some companies choose to halt projects to preserve critical capital.

- Not always the best path!
- Decrease operating expenses and improve net profit, without using capital, by implementing fast payback energy efficiency projects.
- Creative financing options: Off-balance sheet funding, equipment lease financing, on-bill financing, C-PACE financing, etc.
- Energy efficiency projects produce great ROI, reduce operating expenses, improve profitability, increase property value, improve occupant comfort, and reduce GHG emissions.



SEE THE SAVINGS

ENERGY EFFICIENCY



COMMON AREA PROJECT EXAMPLE

LED Lighting Upgrade:

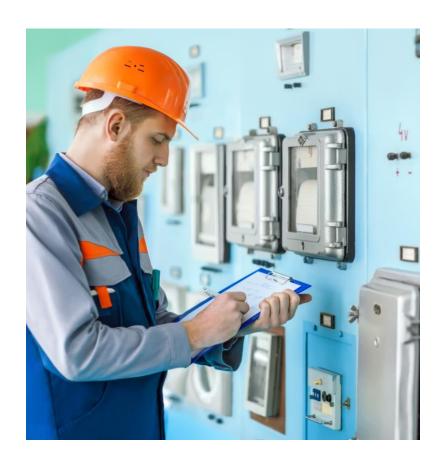
- Annual savings exceed \$14,700
- Free utility rebates exceed \$7,900
- Payback in just 3.2 years
- Reduce the property's carbon footprint by more than 108,000 pounds of CO2 annually

Transitioned to 100% green energy through a long-term supply agreement. 3-year savings of approx. \$7000!



SEE THE SAVINGS

ENERGY EFFICIENCY



ENERGY EFFICIENCY EXAMPLE PROJECT

LED Lighting Upgrade:

Annual Savings: \$103,531

• Payback: 2.6 years

Mechanical Upgrade: Upgrade main and west dust collection systems

Annual Savings: \$94,144

Payback: 3.5 years

Renewables: Rooftop solar (photovoltaic)

No Cost – Power Purchase Agreement

Immediate payback with annual estimated savings of \$12,000

Total annual energy savings from the project exceed \$200,000.

Implementing this project will reduce the facility's carbon footprint by approximately 3.5 million pounds of CO2 annually.

PARTIAL LIST OF ECMS PROVIDED BY EEP

VARIOUS OPTIONS DEPENDING ON PROPERTY TYPE AND PAYBACK (ROI) REQUIRED

- LED Lighting Retrofits, Upgrades and Controls
- Intelligent HVAC/R Controls
- Boiler Plant and Chiller Plant Upgrades
- Free Cooling/Expanded Economizer Logic
- Building Envelope Solutions
- Peak Load Management
- Demand Controlled Ventilation (DCV)
- Variable Speed/Frequency Drives
- Electronically Commutated Motors (ECM)
- Ultrasonic Leak Detection and Remediation
- Intelligent Thermostats
- Time Delay Relays

- Combined Heat & Power (CHP cogen/trigen)
- Building Automation/Energy Management Systems
- Frequency Regulation and Battery Storage
- Demand Response Programs
- Data Center Containment Solutions
- Equipment Replacements/Upgrades
- Photovoltaic, Solar Hot Water, Geothermal
- Radiant Heating
- Energy Benchmarking and Local Law Compliance
- Thermal Qualities Simulation
- Heat Recovery and Re-Use
- Liquid Pool Cover
- Kitchen Hood Controls
- And More!!



GREEN FINANCING

FINANCING OPTIONS

- Equipment Leasing, Bank Financing, Low/Zero Interest Loans: Financing covers 100% of the project costs and is paid back over a predetermined period of time between 24-72 months. There are a variety of financing structures such as monthly or quarterly payments, deferred payments, step payments, etc. All payments are tax deductible as capital payments.
- On-Bill Funding: On-bill funding provides 100% project funding paid back through your monthly electric or gas bill. Repayments are considered an operational expense. Flexible term structures from 36 to 60 months. If you are currently under contract with a 3rd party supplier for your electric or gas, you can get your efficiency solutions implemented today but delay payments for up to 24 months.
- **C-PACE Financing:** Commercial Property Assessed Clean Energy financing is a financing structure through which building owners can finance energy projects via an assessment on their property tax bill. The benefits of C-PACE include zero up-front capital, re-payments qualify as an operational expense, obligation transfers to the new owner after sale of the property, and up to a 25-year term with low interest rates dramatically increases positive cash flow.
- Energy service agreements (ESA), power purchase agreement (PPA), energy as a service (EaaS)...



WHAT ARE THE NEXT STEPS?

FINAL POINTS

- ✓ Understand the high ROI Energy Conservation Methods (ECMs).
 No-obligation energy audit: Identify energy hogs to reduce consumption.
- ✓ Be aware of the current energy market. Lock in long-term contracts to reduce risk.
- ✓ Reach your sustainability goals, while saving money.
 Green energy procurement and community ESG goals.



ANY QUESTIONS?

THANK YOU FOR HAVING US!



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Jack Robbins

