



Energy Efficiency in Commercial Buildings

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Topics for Discussion

- ✦ ***Energy and Your Bottom Line***
- ✦ ***Savings Opportunities***
- ✦ ***How to Proceed***



Energy and Your Bottom Line

- ◆ **Recording and Tracking Costs**
 - ◆ *Electricity*
 - ◆ *Gas*
 - ◆ *Water/Sewer*
- ◆ **Make Changes That Save Energy**
 - ◆ *Operation and Maintenance*
- ◆ **Productivity, Health, and Comfort**
- ◆ **Codes**
 - ◆ *Building Codes*
 - ◆ *Environmental (Recycling/Disposal, IAQ)*



Energy and Your Bottom Line

- ◆ **Investing in Energy Improvements**
 - ◆ **Hire an Expert**
 - ◆ *Analyze complex energy systems*
 - ◆ *Recommend energy efficient modifications*
 - ◆ *Low cost/no cost operation & maintenance*
 - ◆ *Capital investments for new equipment*
 - ◆ *Estimate potential costs and energy savings*
 - ◆ *Implement energy conservation measures*



Savings Opportunities

- ◆ **Lighting – 35% of total electric usage**
- ◆ **HVAC - Heating, Ventilation & Air Conditioning – 55% of total electric usage**
- ◆ **Hot Water – 5% of total electric usage**
- ◆ **Building Envelope – included in lighting and HVAC**
- ◆ **Environmental Impact – 1,000,000 kwh saved = 1500 barrels of oil or 8,000,000 cf of natural gas**



Savings Opportunities

◆ Lighting

◆ No-Cost Projects

- ◆ **Remove unneeded lamps and ballasts**
- ◆ **Turn off lights during unoccupied hours**
- ◆ **Clean fixtures for maximum light output**
- ◆ **Make sure automatic controls are working properly**

◆ Investment Projects

- ◆ **Efficient fluorescents (T-5s & T-8s, Compact Fluorescents), HIDs, Occupancy Sensors, Controls**
- ◆ **Conduct thorough audit; determine savings/costs**



Savings Opportunities

◆ HVAC - Heating Ventilation & Air Conditioning

◆ No-Cost Projects

- ◆ Set Thermostats Higher/Lock Your Thermostats**
- ◆ Eliminate Use During Unoccupied Hours**
- ◆ Turn Off Your A/C Earlier**
- ◆ Use Exhaust Fans As Little As Possible**
- ◆ Replace Air Filters Regularly**
- ◆ Inspect Duct Work, Repair Leaks**

◆ Investment Projects

- ◆ Conduct thorough audit; determine savings/costs**
- ◆ Adjustments/Maintenance by Experts**
- ◆ Upgrading Your HVAC System**



Savings Opportunities

◆ Hot Water Systems

◆ Low-Cost Projects

- ◆ Insulate to Reduce Heat Loss**
- ◆ Reduce the Temperature**
- ◆ Reduce the Amount Used**
- ◆ Reduce Time of Operation**
- ◆ Perform Routine Maintenance**

◆ Investment Projects

- ◆ Upgrading Your Hot Water System**
 - ◆ High Efficiency Water Heater**
 - ◆ Heat Recovery System**



Savings Opportunities

◆ Building Envelope

◆ Low Cost Projects

- ◆ Seal Cracks With Caulking*
- ◆ Repair, Replace, Install Weather-stripping*
- ◆ Replace Broken Glass*
- ◆ Adjust, Replace, or Install Automatic Door Closers*

◆ Investment Projects

- ◆ Add Building Insulation*
- ◆ Install New Windows*
- ◆ Window Treatments*



How to Proceed ?

◆ Business Energy Evaluation (BEE)

◆ FPL Energy Efficiency Services (EES)

- ◆ Turnkey Solutions*
- ◆ Guaranteed Savings (Fla. Statutes)*
- ◆ Projects Paid by Savings (Fla. Statutes)*
- ◆ Recognized Leader in Energy Conservation*
- ◆ Proven Track Record*
- ◆ Long Term Commitment to Customers*

