I've Benchmarked, Now What? A Building Energy Performance Workshop

Wednesday, October 23, 2019, 8-11 am
Silver Spring Civic Building
# I’ve Benchmarked, Now What? Workshop Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speakers</th>
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<tbody>
<tr>
<td>8:45 am</td>
<td>Welcome and Introduction</td>
<td>Jonathan Bauer – The Tower Companies, Bert Hunter – Connecticut Green Bank</td>
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<tr>
<td>9:15 am</td>
<td>Resources Offered by the Utilities</td>
<td>Edward Musz – Pepco Holdings, Monica Downs – Washington Gas, Amy Knight – Potomac Edison</td>
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<tr>
<td>9:35 am</td>
<td>Contractor Insights</td>
<td>Keith Derrington – Recurrent Innovative Solutions, Mike Cain – ERA Building Solutions, Ric Sandoval – Green Generation</td>
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<tr>
<td>10:10 am</td>
<td>Financing Resources – When Your Cash is not Enough</td>
<td>Lindsey Shaw – Dept of Environmental Protection, Tom Deyo – Montgomery County Green Bank</td>
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<tr>
<td>10:20 am</td>
<td>Audience Q&amp;A</td>
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Benchmarking and Beyond

October 23, 2019
I've Benchmarked, Now What? A Building Energy Performance Workshop

Jonathan Bauer, Sustainability Manager
Tower Overview

THE TOWER COMPANIES AT A GLANCE

- **6 MILLION** square feet in development
- **13 MILLION** square feet in development
- **100** employees
- **90%** of portfolio operating under a green lease
- **100%** renewable energy commitment
- **2,000** employee volunteering hours used since 2012
- **15%** staff have been with the company for 20 years or more
- **42%** of our Senior Leadership team are women
- **95%** LEED Certified
- **80%** of Office Building Portfolio is ENERGY STAR® Certified
- **Two** dedicated sustainability team members; including senior leadership position

PEOPLE. PROPERTIES. PURPOSE.

At The Tower Companies, we are committed to making a difference through our business and community. We develop, own, and manage commercial, retail, and multifamily residential properties in the Washington D.C.-metro area while being mindful of our global impact. Our dedication to the nation’s capital has allowed us to build long-term relationships and foster lasting community impact.

Since our founding in 1947, we have continued to thrive while staying true to the belief that our actions and business can positively benefit the health of our people and planet.

OUR VISION

We envision a world where buildings inspire and enrich the lives of their occupants. In this world, people seek out buildings that create positive social change by helping to sustain the environment, better their health and well-being, and connect them to thriving communities.
Our Commitment

At every decision point, we consider our ability to advance the real estate industry, impact on the environment, and commitment to the well-being of people and local communities.
Everything starts with benchmarking...

Energy efficiency is like running a race...wear the right shoes and socks, follow a plan, and you’ll finish the race!
Taking the next steps

- Benchmarking & Goal Setting
- Green Building Standards
- Energy Conservation Measures
- Green Lease Guidelines
- Real-Time Energy Management
- Tenant Engagement
- Energy Procurement
- Demand Response
- Renewable Energy
Upgrades
1. Time-of-day controls for perimeter units
2. Variable Frequency Drives (VFD) for loop pumps
3. Time-of-day scheduling for cooling tower and open loop pumps with closed loop temperature override

Financials
- Cost: $44,900
- Cost after grants: $22,753
- Energy Savings: $40,000
- Payback: 6 months
Benchmarking and Beyond

Jonathan Bauer, Sustainability Manager

Jonathan.Bauer@TowerCompanies.com

Read Tower’s Inaugural Corporate Responsibility Report to Learn More:
https://towercompanies.com/corporate-responsibility/
Remarks by Bert Hunter
EVP and Chief Investment Officer at Connecticut Green Bank
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Resources Offered by the Utilities

- Edward Musz – Pepco Holdings
- Monica Downs – Washington Gas
- Amy Knight – Potomac Edison
Energy Savings for Business Program

Edward Musz, Manager, Energy Efficiency, Pepco
October 23, 2019
Overview

- Empower Maryland

Reduce Energy. Save Money.

Maryland programs are funded by a charge on your energy bill.

Programs can help you reduce your energy consumption and save you money.
Overview

- Maryland Small Business Program

Quick Energy Check-Up (QEC)
Free installation of energy-efficient measures worth up to $250

Incentives
Many incentives cover up to 70% of estimated project cost

Service Providers
Pre-approved Service Providers perform the work

Energy Advance Financing
0% interest for up to 24 months
Eligibility

- Maryland Small Business Program

Small business customers participating in the program include restaurants, retail establishments, hotels, stores, groceries, churches, non-profits and everything in between.

- Monthly demand must be 60 kW or less
- Commercial account in Maryland
- Occupied building in the previous 12 months
- Account may not be temporary
Incentives

- Maryland Small Business Program

**Lighting Fixtures & Controls**
Upgrade lighting to energy efficient LEDs along with lighting sensors.

**Packaged HVAC Units**
Replace aging units with newer technologies.

**Additional Incentives**
Including hot water heaters, clothes washers, and dehumidifiers.

**Variable Frequency Drives**
Increase energy efficiency on fans and pumps based on your energy needs.

**Chillers**
Replace one or more old chillers with more energy efficient central chiller-based cooling systems.

**Commercial Kitchen & Refrigeration**
Energy efficient refrigeration and cooking equipment.
Small Business Energy Advance

- Maryland Small Business Program

- 0% interest on bill repayment available
- $2,500 minimum project cost including materials and labor
- No credit check required, but account must be in good standing
- Repay in 6, 12, or 24 month installments on your electric bill.
Summary

- Program is funded by a charge on your energy bill.
- New energy-efficient equipment lowers your energy consumption and saves you money.
- A variety of incentives are offered including lighting upgrades, HVAC, Variable Frequency Drives, refrigeration and cooking equipment.
- Many incentives cover up to 70 percent of estimated project cost.
- The Small Business Energy Advance allows you to repay the cost of the project over a 2 year period at no interest.
WASHINGTON GAS MARYLAND C&I ENERGY SAVINGS PROGRAM

MONICA DOWNS / OCTOBER 23, 2019
PROGRAM PORTFOLIO

COMMERCIAL PORTFOLIO

Existing Business

Custom Business Solutions

New Business Construction
PROGRAM STRUCTURE

- **Existing Business and New Business Construction:**
  - Rebates are based on a fixed, prescriptive rate
  - All applications must be submitted via online application center
  - All projects require **pre-approval** before purchasing or installing new equipment
  - Service Providers and contractors must register with the program

- **Custom Business Solutions:**
  - Incentives are based directly on proven energy savings, for equipment not eligible for prescriptive rebates
  - Before application, service providers and customers should schedule scoping call with program engineering team
EXISTING BUSINESS EXAMPLE: HEALTHCARE

- (4) 1250 MBH boilers at 96.2% thermal efficiency
- Large Boiler Tier 2 Rebate: $2.50 per MBH
- Total Rebate: $12,500
NEW BUSINESS CONSTRUCTION EXAMPLE: ELEMENTARY SCHOOL

• Equipment Installed: 4 storage water heaters and 1 boiler
  • (2) 300 MBH water heaters: Rebate: $500
  • (2) 125 MBH water heaters: Cost: Rebate: $500
  • (1) 1500 MBH boiler: Cost: Rebate: $1125
  • Total rebate: $3,125
CUSTOM BUSINESS SOLUTIONS EXAMPLE: CONDOMINIUMS

- Boiler replacement
- Custom project because boiler size exceeds Existing Business cap
- Project due to closeout in 2020
- Pre-approved rebate amount: $47,050.65
- Rebate can be reduced if actual savings do not match calculated savings
- Estimated savings: 16,500 therms
EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to www.energysaveMD.com.
PROGRAM OVERVIEW

- SMALL BUSINESS DIRECT INSTALL
  - Customers with average annual demand under 60 kW
  - LED lighting, HVAC upgrades, refrigeration, and controls
  - Typically up to 70% of the cost covered by Potomac Edison
  - Implemented by Willdan

- ENERGY SOLUTIONS FOR BUSINESS PROGRAM
  - Large commercial and industrial facilities
  - All measures above including custom measures like chiller upgrades, ventilation systems, combined heat and power
  - Up to 50% of the cost covered by Potomac Edison
  - Implemented by CLEAResult
SMALL BUSINESS DIRECT INSTALL PROGRAM

**Turnkey Process**
Free professional property assessment and energy-saving equipment.

**Minimal Cost**
Save up to 70% on qualified upgrades.

**Fast Turn-Around**
Projects typically complete within 90 days.

**Ongoing Savings**
Save energy and money for years to come!

**TYPES OF BUSINESSES**

- Offices
- Schools
- Police/Fire Stations
- Small Retail
- Food and Beverage
- Multifamily (common areas)

- Churches
- Grocery/Convenience
- Liquor Stores
- Healthcare
- Auto Repair
- Warehouse/Industrial
For a limited time, we will provide customers with LED screw-in lamps and tubes at no additional cost, if the customer agrees to do the install on their own.

The customer must install the products within 2 weeks.

Products include:

- A-19, PAR, BR, MR16, candelabra
- 4’ and 8’ linear tubes (for T8 relamp only)
ENERGY SOLUTIONS FOR BUSINESS PROGRAM

- Lighting
- HVAC
- Food Service & Commercial Kitchens
- Appliances
- Consumer Electronics
- Agriculture
- Custom Projects
- Combined Heating & Power
41 incentives available for energy efficient LED’s, linear fluorescents, exit signs, and lighting controls
LED lamps and fixtures must be ENERGY STAR® or Design Lights Consortium (DLC) certified
Type B fixtures do not qualify under this Program
Incentives are capped at 50% of overall total project cost, defined as labor and material associated with the project’s relevant scope of work
A full listing of eligible lighting measures, with the incentive amounts, can be found here: https://energysavemd-business.com/lighting

MUNICIPAL LIGHTING
Incentives are available for:

- Traffic lights and pedestrian signals
- Customer-owned street and area lighting
CUSTOM

INCENTIVES ARE OFFERED UP TO 50 PERCENT OF THE TOTAL PROJECT COST FOR RETROFIT PROJECTS, AND UP TO 75 PERCENT OF THE INCREMENTAL COST FOR NEW CONSTRUCTION OR MAJOR RENOVATION PROJECTS. INCENTIVES ARE CAPPED AT $1 MILLION PER PROJECT, PER CUSTOMER, PER YEAR.

Custom projects include building shell, electrical and mechanical improvements that reduce energy consumption and demand by improving building energy performance.

Custom measures such as compressed air, process improvements and building controls qualify for incentives

Retro commissioning

Combined Heat and Power
Please visit our table for additional program information!

Energy Solutions for Business Program
https://energysavemd-business.com

Small Business Direct Install Program
https://energysavemd-smallbusiness.com