

# Building Benchmarking Work Group

September 16, 2014 | 2:00-4:00pm | EOB Auditorium

# Agenda

- Overview of Bill 2-14 as adopted
- County benchmarking efforts
- Perspectives on benchmarking
  - Shaun Pharr, AOBA – Gov't Affairs
  - Jessica Long, JBG – Commercial Operations
  - Lorie Shellender, Pepco – Data Access
- Work group charter
  - Subcommittees

# Why Benchmark?

*“Even if you don’t measure it,  
you still must manage it.”*

*So why not measure it?*

- Utilities are typically the largest non-fixed expense
- Market transparency (tenants want to measure too)
- Efficient operations, projections, and resource use

# Why Benchmark?

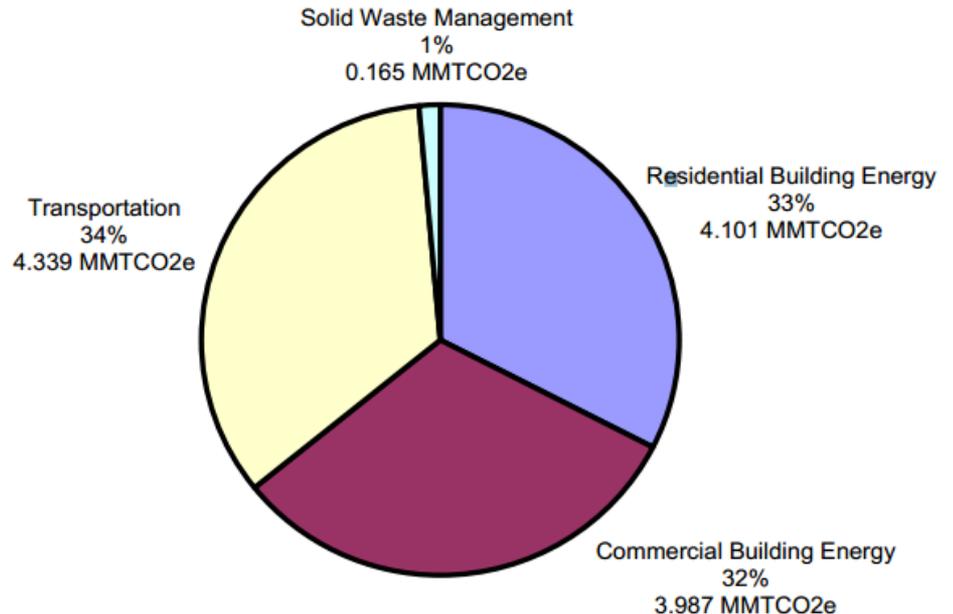
## County Goal

*“to reduce greenhouse gas emissions 80% by 2050 from the FY05 base year...”*

- Buildings are largest contributor to GHG
- Commercial is 1/3 of total

**Benchmarking is a launching point for commercial energy efficiency (O&M, PACE, Incentives)**

Figure ES-1 – Total Montgomery County GHG Emissions in FY05



# The Bill: Update

- Introduced January 2014 and passed May 2014
- Following best practices of other jurisdictions, mandates **certain** non-residential buildings report and disclose energy use
- Main Changes
  - County will “lead-by-example”
  - Non-residential (No multi-family)
  - Deadlines extended
  - Auditing and Retro-commissioning aspects removed
  - Development of a Work Group
- Benchmarking Bill 2-14  $\neq$  IgCC (Green Construction Code)

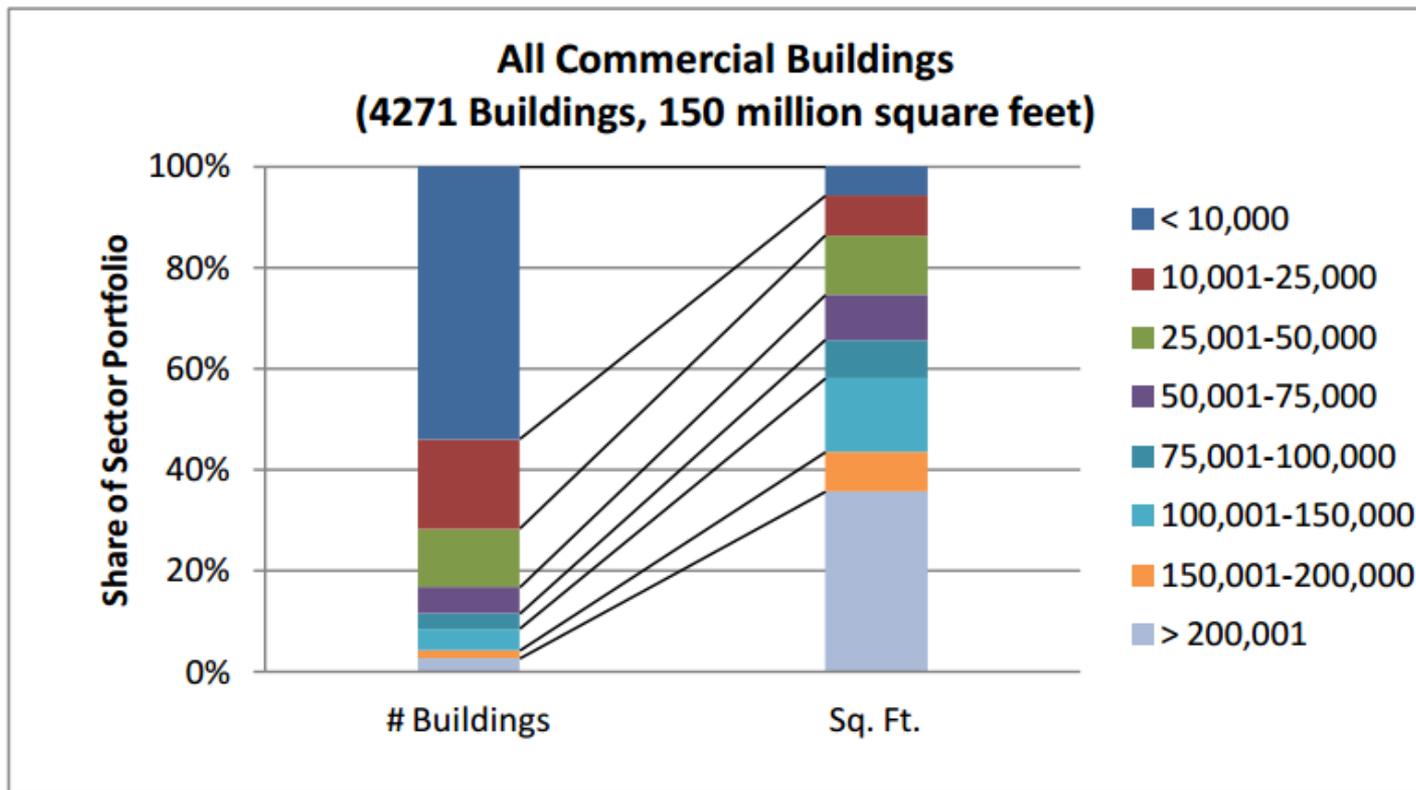
# The Bill: Scope

## “Covered Buildings”

- County Buildings: 50k square feet and greater
  - Group 1: Non residential 250k square feet and greater
  - Group 2: Non residential 50k square feet and greater
- The Covered Buildings focus on the largest and most cost-effective opportunities in the county

# The Bill: Scope

**Figure ES-1. Distribution of Commercial Floor Space by Building Size**



# The Bill: Exemptions

## Exempt Use Types

- Industrial/Manufacturing
- Communications/Transport/Utilities

## Waivers

- Financial distress
- Less than 50% occupancy
- New construction

## Covered Building List

- The list of covered buildings will be published on the County benchmarking website, details TBD. Sources:
  - Tax Assessor Data
  - CoStar

# The Bill: Deadlines

<b>Group</b>	<b>Benchmarked Period</b>	<b>Deadline</b>
County	Calendar Year 2014	June 1, 2015
Group 1: 250k sq ft +	Calendar Year 2015	December 1, 2016
Group 2: 50 sq ft +	Calendar Year 2016	December 1, 2017

# The Bill: Tenants

## Tenant Data

- Can request aggregate building data, no need to request data or authorization from tenant
  - Note: Thresholds to access aggregate data may vary by utility. E.g. Pepco provides aggregate if there are 5+ tenants.
- To be requested in writing by the owner no later than March 1 – bills or data authorization
- Tenants are requested to respond within 30 days
  - Lack of data will impact the accuracy and value of data

# The Bill: Portfolio Manager (PM)

**Free software** provided by the U.S. Environmental Protection Agency (EPA)

- 40% of commercial building space is in PM
- Standard for benchmarking in Boston, New York City, District of Columbia, Philadelphia, Seattle
- Technical resources available online:  
<http://portfoliomanager.energystar.gov>

# The Bill: Data

## **Data Verification**

- Quality control necessary for value of policy
- Every 3 years by a “licensed professional”
- Work group to discuss verification options

## **Reporting and Disclosure**

- 1-year grace period of non-disclosure (based on first compliance deadline)
- Online interface
- Fields to be disclosed are not finalized

# The Bill: Work Group

## **Work Group Charge**

- Review the benchmarking process as applied to county-owned facilities
- Report to the County Council and County Executive with recommendations on the benchmarking process as applied to privately-owned facilities, including any proposed amendments to the County law.

# Resources: Outreach

## **DEP Outreach Partners**

- Energy service providers
- Utilities
- Chambers and business associations
- NGOs with building/business and realtor members
- Communications, print and web, email list

## **Events**

- Information and training events
- Seeking event partners!

# Resources: Technical Resources

- **Detailed guidance document** (in progress)
  - With screen shots
  - Step-by-steps
- **Resources by EPA Energy Star**
  - Live webinars and videos
- **Technical ambassadors**
  - Train-the-trainers with EPA
- **Office hours and/or online forums**
- **Energy service providers**



# Benchmarking Rewards

- **Better management** of costs
  - Understand energy costs and compare with peers
- **Recognition** for efficiency improvements
  - By tenants
  - Through programs
- **ENERGY STAR** Certification
  - Eligibility for GSA tenants
- **Access custom rebates** by utilities
  - Can include benchmarking costs in project costs eligible for incentives

# Questions?

Feel free to contact Michelle Vigen  
with any questions:

[Michelle.Vigen@montgomerycountymd.gov](mailto:Michelle.Vigen@montgomerycountymd.gov)

240-777-7749

Benchmarking website:

<http://montgomerycountymd.gov/DEP/Energy/benchmarking.html>

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  - JBG Energy Management
  - AOBA Government Affairs
  - Pepco Data Access and Automation
- Work group charter
  - Subcommittees

# Montgomery County Government Facility Benchmarking Efforts

We deliver **GREEN SERVICE** throughout County operations

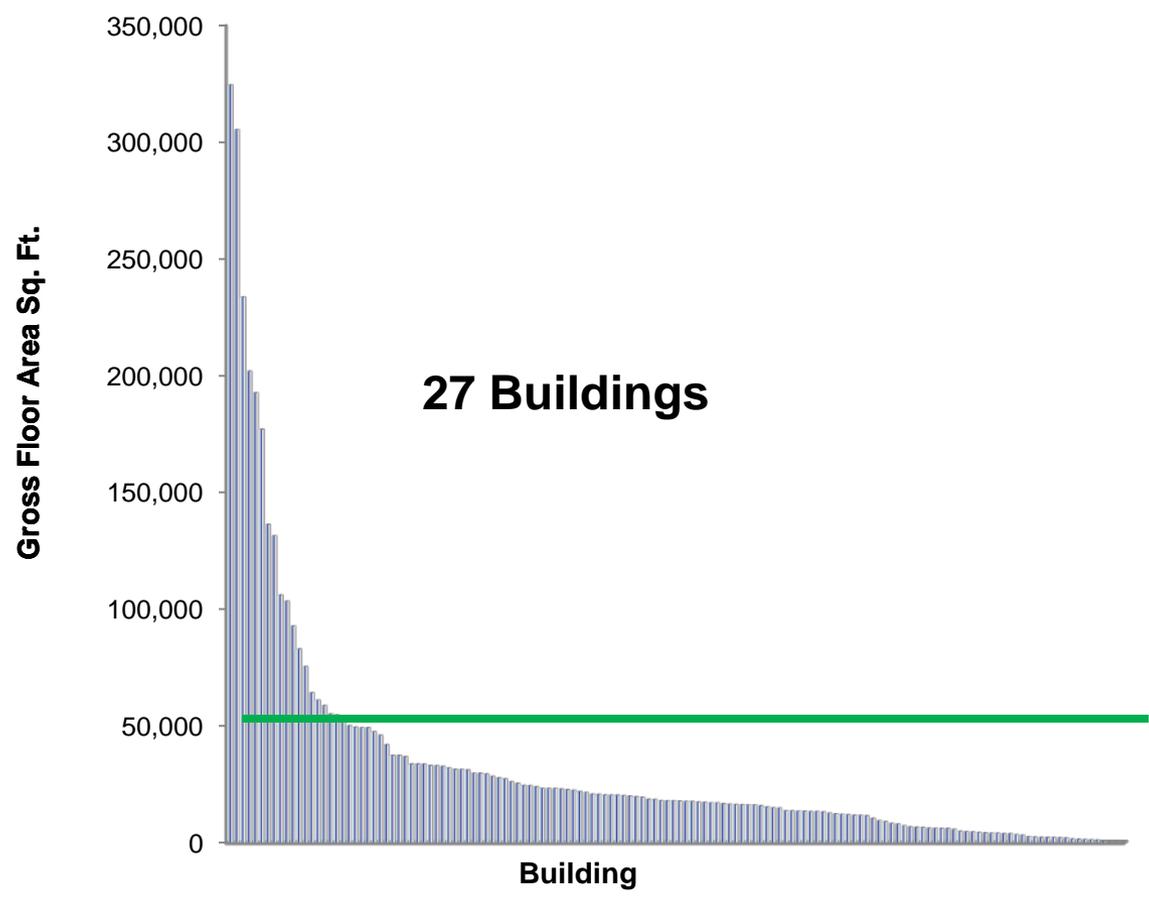




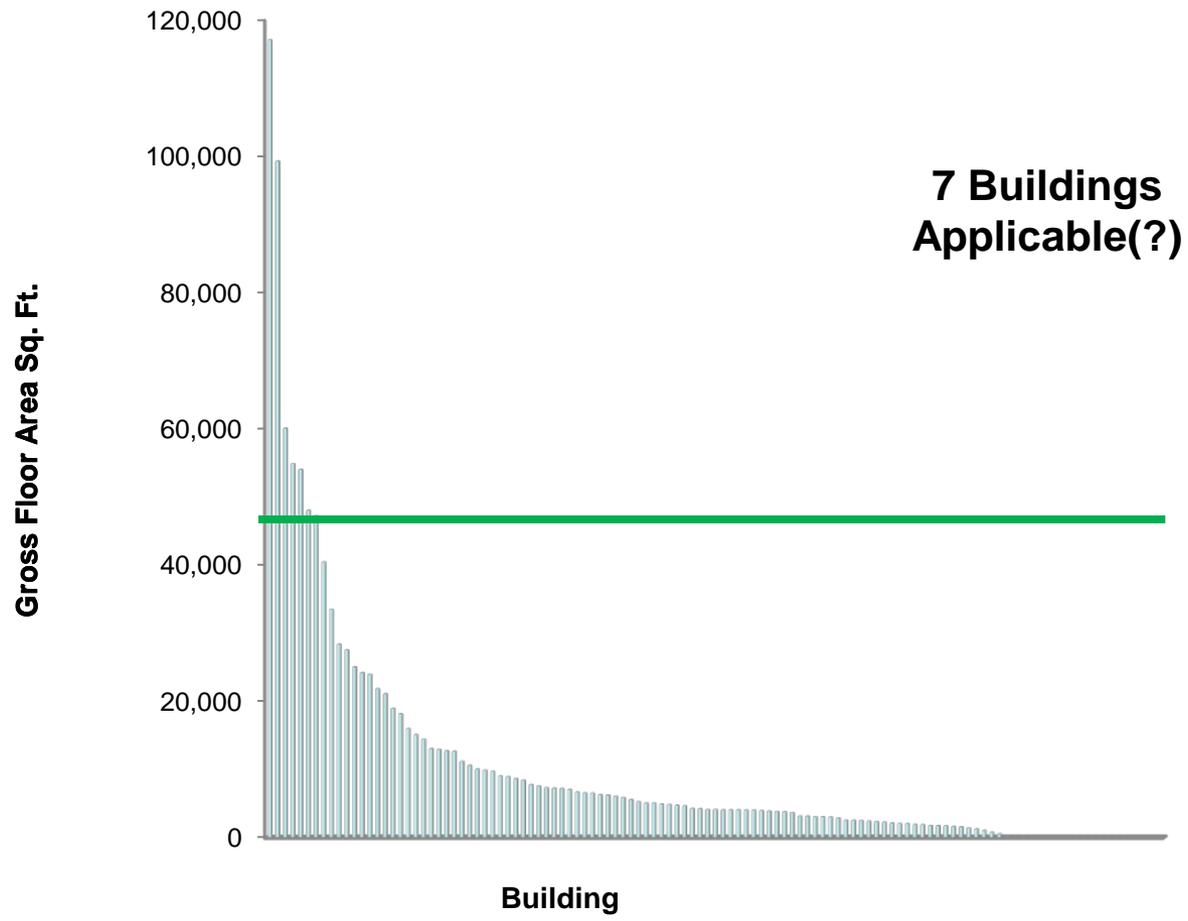


# Office of Energy & Sustainability

Owned and Occupied



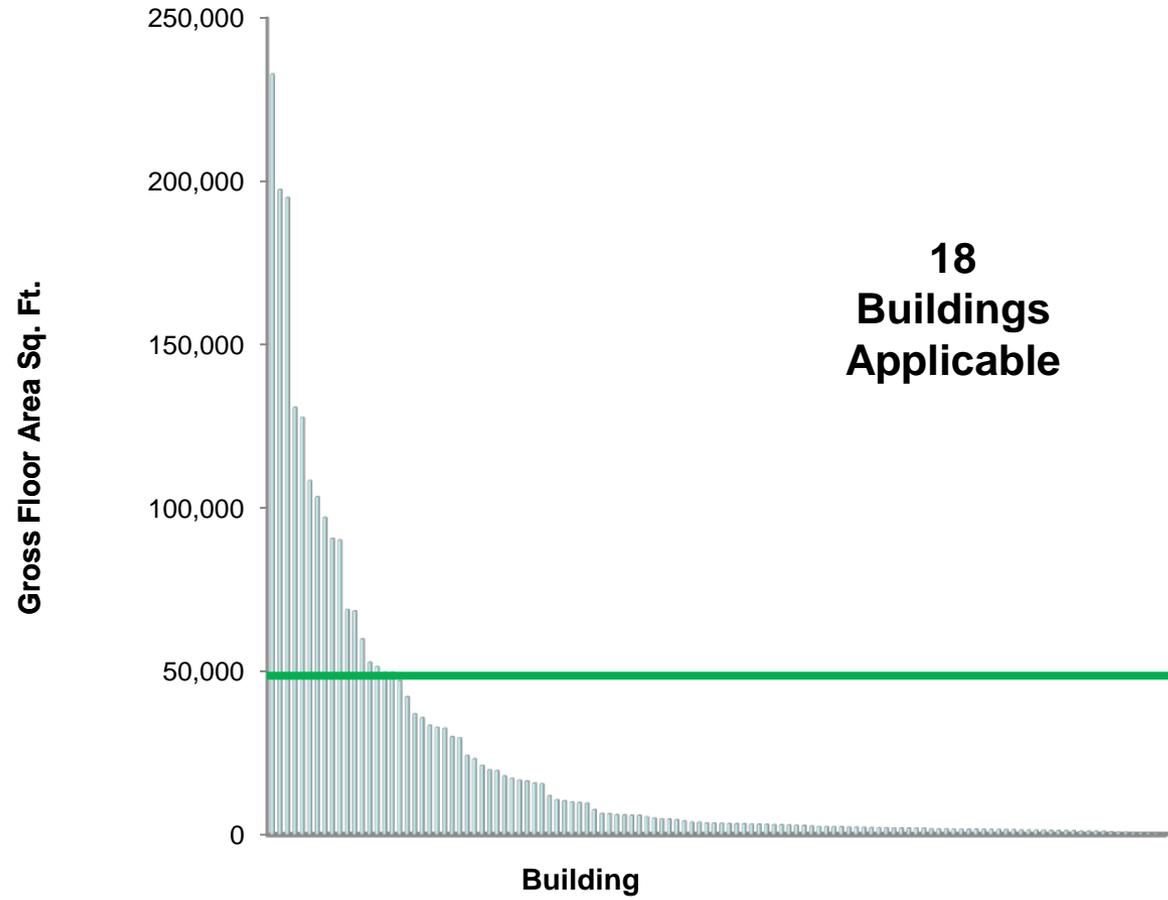
Leased





# Office of Energy & Sustainability

## Leased Out





# ENERGY STAR® Statement of Energy Performance

# 74

## COLESVILLE HEALTH CENTER

Primary Property Function: Senior Care Community  
 Gross Floor Area (ft²): 26,500  
 Built: 1970

For Year Ending: June 30, 2008  
 Date Generated: September 15, 2014

ENERGY STAR®  
 Score<sup>1</sup>

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

### Property & Contact Information

Property Address	Property Owner	Primary Contact
COLESVILLE HEALTH CENTER 14015 NEW HAMPSHIRE AVENUE COLESVILLE, Maryland 20904	_____ ( ) - _____	_____ ( ) - _____

Property ID: 1593059

### Energy Consumption and Energy Use Intensity (EUI)

Site EUI	Annual Energy by Fuel	National Median Comparison
102.9 kBtu/ft²	Natural Gas (kBtu) 1,525,494 (56%) Electric - Grid (kBtu) 1,202,552 (44%)	National Median Site EUI (kBtu/ft²) 123.6 National Median Source EUI (kBtu/ft²) 243.6 % Diff from National Median Source EUI -17%
Source EUI		Annual Emissions
202.9 kBtu/ft²		Greenhouse Gas Emissions (Metric Tons CO2e/year) 242

### Signature & Stamp of Verifying Professional

I \_\_\_\_\_ (Name) verify that the above information is true and correct to the best of my knowledge.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Licensed Professional

\_\_\_\_\_  
 ( ) - \_\_\_\_\_

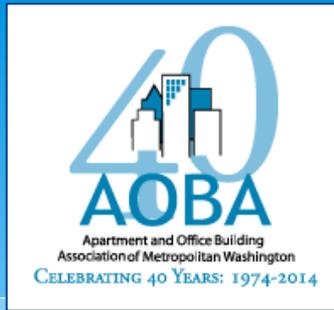


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# Perspectives on Benchmarking

- **Shaun Pharr/Nicola Whitman**
  - **Government Affairs, AOBA (Apartment and Office Building Association)**
- **Jessica Long**
  - **Commercial Operations, JBG**
- **Lorie Shellender/Manuel Vera**
  - **Data Access and Automation, Pepco**



# **PLANNING FOR BENCHMARKING IN MONTGOMERY COUNTY**

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## **LESSONS LEARNED FROM THE DISTRICT OF COLUMBIA**

**W. Shaun Pharr, Esq.**

**Senior Vice President of Government Affairs,**

**Apartment and Office Building Association of Metropolitan Washington**

# ABOUT AOBA

**What We Do:** AOBA is the leading membership organization representing commercial office building and multi-family residential real estate in the Washington, DC area. Serving members for more than 35 years since its establishment in 1974, AOBA works to protect and enhance the value of its members' investments through effective leadership and advocacy, information exchange, and professional development. AOBA's non-partisan advocacy activities in DC, Maryland and Virginia provide members with substantial savings in utilities, property taxes and other regulatory fees – savings that enhances value to owners, tenants and residents.

**Who We Are:** AOBA members are owners or managers of commercial and multi-family residential properties, as well as companies that provide products and services to the real estate industry. **Currently, the combined portfolio of AOBA's membership is more than 155.8 million square feet of office space and approximately 208,710 residential units in the District of Columbia, Maryland and Virginia.**

**SUBURBAN MARYLAND**  **AOBA MEMBERS ARE OWNERS AND MANAGERS OF MORE THAN 110,000 APARTMENTS UNITS AND OVER 23 MILLION SQUARE FEET OF OFFICE SPACE IN SUBURBAN MARYLAND; THE MAJORITY OF THEIR OFFICE SPACE, APPROXIMATELY 18,724,504 SQUARE FEET, IS IN MONTGOMERY COUNTY.**

**National Representation and Certification:** AOBA is the local federated member of the Building Owners and Managers Association International (BOMA) and the National Apartment Association (NAA). Through these affiliations, AOBA members are represented on Capitol Hill and before federal agencies, and have access to nationally recognized certification programs, research and information, and networking forums.

**Working Together to Reduce Energy Costs:** AOBA's subsidiary, AOBA Alliance, Inc., provides owners and managers the ability to achieve savings in purchasing energy and energy-related services.

# COMMERCIAL BUILDINGS LEADING THE WAY WITH BENCHMARKING ... EVEN BEFORE STATUTORY MANDATES

[2014 EPA rankings: Top cities with the most ENERGY STAR certified buildings](#)

#2 Washington, DC

[2013 EPA Announces Cities with the Most ENERGY STAR Buildings in the US: #2 Washington, DC](#)

[Top 25 Cities with Most ENERGY STAR Certified Buildings in 2011: #2 Washington, DC](#)

[Top Cities With the Most ENERGY STAR Certified Buildings in 2010: #2 Washington, DC](#)

[List of Top 25 Cities with Most ENERGY STAR Buildings in 2008: #2 Washington, DC](#)

# Green Buildings in the District of Columbia

September, 2014

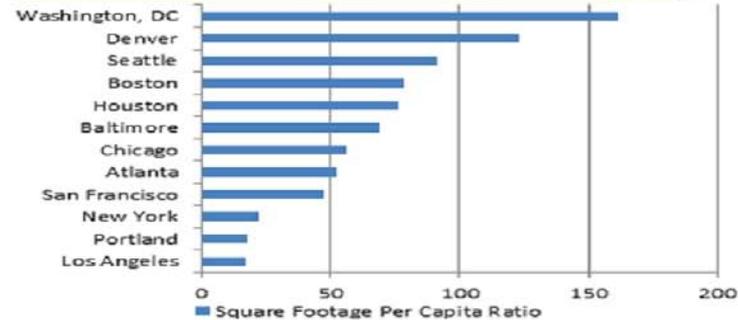


With the passage of the landmark Green Building Act in 2006, the District became the first major city in the U.S. to require green building certification for both the public and private sectors. Per capita, the District leads all cities in the U.S. in the number and square footage of both LEED and ENERGY STAR certified buildings and projects.

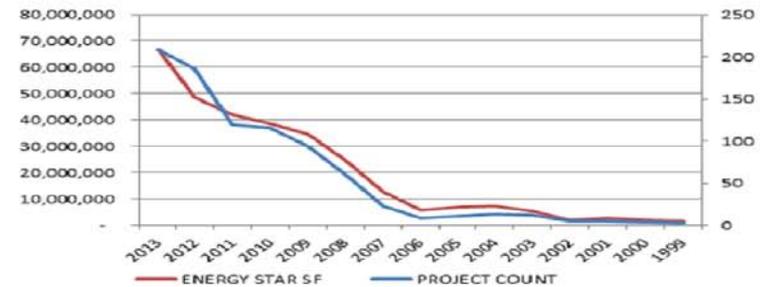
## District of Columbia Rankings Nationally

- ⊕ 1<sup>st</sup> in nation of per-capita LEED certified projects and square footage for cities with more than 200,000 people
- ⊕ 1<sup>st</sup> in nation of per-capita LEED certified projects among states
- ⊕ 4<sup>th</sup> in nation in certified square footage in total numbers among U.S. cities
- ⊕ 1<sup>st</sup> in nation of per capita ENERGY STAR certified buildings for cities with more than 200,000 people
- ⊕ 2<sup>nd</sup> in nation (DC metro area) of total ENERGY STAR certified buildings in real numbers
- ⊕ **LEED Projects Overview (as of 9/9/14)**  
524 LEED certified projects  
100.5 million LEED certified square footage
- ⊕ **ENERGY STAR Projects Overview (as of 12/31/13)**  
208 ENERGY STAR projects in 2013  
66.8 million ENERGY STAR square feet

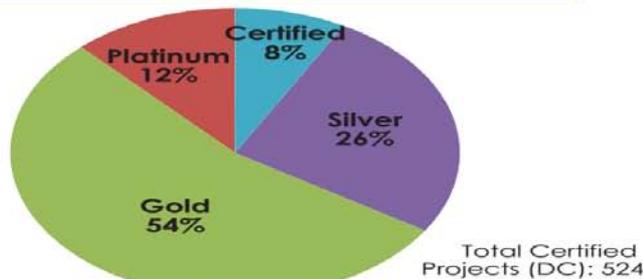
## LEED Certification Square Footage Per Capita



## ENERGY STAR Certification in the District, 1999-2013



## LEED Certification Levels - District of Columbia



## LEED Certification Levels - United States



# DC BENCHMARKING – REGULATORY OVERVIEW

The District's [Clean and Affordable Energy Act of 2008 \(CAEA\)](#) requires owners of buildings over 50,000 square feet to annually measure and report their energy and water use to the District's Department of Energy (DDOE) by April 1.

**FINAL REGULATIONS:** Final regulations were published on January 18, 2013 and can be found at 20 DCMR § 3513 -Energy Performance Benchmarking of Privately-Owned Buildings.

**REPORTING BEGINS:** The first reporting deadline was April 1, 2013 for buildings over 100,000 square feet. In 2014, all buildings over 50,000 square feet were required to report their energy and water consumption for 2013 to DDOE.

# IMPORTANCE OF OUTREACH AND PARTNERSHIPS

## BY THE NUMBERS

- \*AOBA participated in more than 41 meetings and briefings on benchmarking-related issues, including an April 10, 2013 briefing (after the first reporting deadline) on lessons learned in year one with panelists representing office buildings, apartments, DDOE and the DC Sustainable Energy Utility.
- \*AOBA has sent more than 36 notices and newsletters to members.
- \*Countless e-mails and phone calls with DDOE staff.

**AOBA WEBSITE-** [Private Energy Benchmarking in the District of Columbia](#) – Everything members need to know about benchmarking, including any updates on changes to reporting deadlines. **Montgomery County:** AOBA will create a similar page on its website for members with properties in Montgomery County.

**Benchmarking training sessions:** AOBA helped market benchmarking training sessions offered by the DC Sustainability Energy Utility. **Montgomery County:** AOBA will host and market other training sessions for members with properties in Montgomery County.

# AOBA WEBSITE- HIGHLIGHTS

## PRIVATE ENERGY BENCHMARKING IN DC

**REMINDER: APRIL 1, 2014 BENCHMARKING REPORTING DEADLINE**

### WHAT TO DO IF YOU ARE STILL WAITING FOR UTILITY DATA

- \* Per the District Department of the Environment (DDOE), the agency will accept interim partial submissions for 2013 reporting from those building owners and managers which have requested but are still awaiting utility data from the utilities. **REMINDER:** District law requires all building owners subject to the 2014 reporting deadline to provide whole building aggregate electricity data. (20 DCMR 3513.7(a)(2)). This service has been available [since February 1, 2013](#).

### BUILDING OWNERS/MANAGERS MUST FOLLOW THE STEPS BELOW TO AVOID BEING NON-COMPLIANT

- \* **REQUEST DATA:** Request consumption data from Pepco, Washington Gas, and/or DC Water by April 1, 2014. If requesting aggregate data from Pepco, the request must include the District Real Property Unique ID number for the tax lot(s), for tracking purposes, and a list of all the electric meter numbers that should be aggregated.
- \* **ENTER DATA YOU HAVE:** Enter into ENERGY STAR® Portfolio Manager® the energy and water consumption information you already have. Indicate in the notes field of ENERGY STAR® Portfolio Manager® that this is a partial report, with the date of your outstanding utility request(s), and select in the meter configuration option what portions of the building energy and water use are included in the partial report. ([Click here for instructions on how to specify your meter configuration.](#))
- \* **REPORT:** [Submit to DDOE a interim partial benchmarking report](#) that contains the energy and water consumption information you do have access to by April 1, 2014.
- \* **SUPPLEMENT REPORTED DATA:** Once you receive complete utility data, enter the additional data into ENERGY STAR Portfolio Manager and edit the notes and meter configuration fields accordingly. Then [submit](#) an updated, complete report to DDOE **within thirty (30) days of receipt of the updated data.**

# AOBA WEBSITE- HIGHLIGHTS

## Private Energy Benchmarking in DC

**OBTAINING BUILDING AND NON-RESIDENTIAL TENANT DATA:** In order to benchmark your building(s), you must collect energy and water consumption information along with information about how the space is used. Building owners can request the data from their non-residential tenants or from the utility companies. [2013 District Data Collection Worksheet](#) provides a list of the required data, and guidance on various topics such as how to collect data for multiple buildings or vacated or vacating non-residential tenants.

**COLLECTING USAGE DATA FROM NON-RESIDENTIAL TENANTS:** District law requires all building owners subject to the 2014 reporting deadline to provide whole building aggregate electricity data.

### **BUILDINGS WITH FIVE OR MORE ELECTRIC USER ACCOUNTS:**

**AGGREGATE DATA:** Pepco has developed a [2013 Building Electricity Consumption Data Request Form](#) for obtaining historical consumption data in a building with five or more separately-metered tenants. **Members should note that Pepco may take up to 30 business days to process the data request.** The requesting party must provide all the electric meter numbers (or account numbers) for the building.

**BUILDINGS WITH FOUR OR FEWER ACCOUNTS/NON-ELECTRIC USAGE:** For buildings with four or fewer accounts, the consent of each customer is required; DDOE has a standard waiver form, [Utility Account Information Data Release Form](#), for this purpose.

**AGGREGATE DATA IS NOT YET AVAILABLE FROM DC WATER AND WASHINGTON GAS.** Building owners/managers may also use the [Utility Account Information Data Release Form](#) to obtain water and gas information.

# AOBA WEBSITE- HIGHLIGHTS

## Private Energy Benchmarking in DC

### ADDITIONAL BENCHMARKING RESOURCES

[DDOE Benchmarking in the District](#)

[DC Official Code § 6-1451.03. Privately-Owned Buildings and Projects](#)

[20 DCMR § 3513 Energy Performance Benchmarking of Privately-Owned Buildings](#)

**ALL DDOE BENCHMARKING FORMS:** Click on this link for a list of all applicable forms or the individual links below:

[2013 District Benchmark Reporting Template](#)

[DDOE Benchmarking Reporting Guide](#)

[2014 DC Building Energy Benchmarking Information Flyer](#)

[DDOE's Frequently Asked Questions - Benchmarking](#)

#### Topics include:

- Benchmarking property with multiple buildings (No. 22)
- Building occupant's work affects national security (No. 26)
- Requesting data from federal tenants (No. 35)
- Vacating tenants (Nos. 36 and 37)
- Mixed-use buildings (No. 45)

**NEW!** [District Benchmark Reporting Template, 2013](#)

[View Public and Private Building Benchmarking Results](#)

[UPDATED - 2013 District Data Collection Worksheet](#)

[Compliance Checklist](#)

[Utility Account Information Data Release Form](#)

[2013 Building Consumption Request Form - Pepco](#)

[UPDATED - 2013 Non-Residential Tenant Data Request Form](#)

[DDOE responses to comments from the regulated community on the Second Proposed Rulemaking](#)

[All comments received on the Second Proposed Rulemaking](#)

# HIGHLIGHTS – CONCERNS

## ACCESS TO DATA – PROBLEM AND SOLUTION

### OBTAINING ENERGY DATA FROM COMMERCIAL TENANTS CAN BE CHALLENGING

Retail tenants, including restaurants, are usually separately metered, requiring a building owner/manager to obtain the required energy consumption data from the tenant. While tenants are obligated to provide the data and subject to fines for failing to do so, obtaining the information can involve multiple requests and visits to the tenant.

**Owner/Tenant Relations:** Additionally, current DC law places the building owner/manager (who is by definition in the business of tenant retention), in the uncomfortable position of reporting their noncomplying tenants to the District for enforcement by DDOE.

### SOLUTION

**Aggregate data:** Pepco began providing aggregate data in 2013 and in 2014 District law required all building owners subject to the 2014 reporting deadline to provide whole building aggregate electricity data. The ability of utilities to electronically transfer aggregate usage data will facilitate the ability of building owners to obtain and report **whole building data** a stated goal of benchmarking laws.

**Enhanced access to aggregate data coming to the District:** [Sustainable DC Omnibus Amendment Act of 2014](#)

- Online portal by January 1, 2015-** Pepco and Washington Gas must provide an online portal through which a building owner can: request and transfer aggregate account data, or individual customer account data the building owner is duly authorized to access; manage requests made; and discontinue active requests.

- Washington Gas: By January 1, 2018,** the gas company must upload requested consumption data automatically on an ongoing basis, at least once every 45 calendar days, to the requestor's ENERGY STAY Portfolio Manager account, as well as make the data available for an account holder to download in a common format.

### PRIVACY PROTECTIONS

Customers have an expectation of privacy in their account information and utility companies have historically not disclosed customer account information without the prior written consent of the customer. District and Maryland law recognize the importance of preserving the confidentiality of customer account information.

# CUSTOMER PRIVACY PROTECTIONS DC AND MARYLAND LAW

## MARYLAND

**Maryland Public Utility Companies Code provision provides the following consumer protections: § 7-505(b)(6)**(The Commission shall issue orders or regulations to prevent an electric company and an electricity supplier from disclosing a retail electric customer's billing, payment, and credit information without the retail electric customer's consent, except as allowed by the Commission for bill collection or credit rating reporting purposes.)

## DISTRICT OF COLUMBIA

**DC Official Code § 34-1507(b)(1)** Unless a customer consents in writing, a market participant or the electric company may not use information of the type specified in subsection (a)(1) of this section for any purpose other than the purpose for which the information was originally acquired.

### 15 DCMR § 3903 Disclosure of Information

**3903.1** An energy utility shall not disclose **ANY customer-specific information obtained in connection with the provision of regulated utility services except upon written consent of the utility customer.** The consent form signed by the utility customer shall state the purpose of the disclosure.

**3903.2** Notwithstanding the limitations in subsection 3903.1, customer-specific information may be disclosed for lawful bill collection or credit reporting purposes, pursuant to a subpoena or request by a duly authorized law enforcement official, or pursuant to a lawful request authorized by local or federal law.

# HIGHLIGHTS / CONCERNS

## RETAIL SPACE/EXCLUDING CERTAIN NON-RATABLE COMMERCIAL SPACE

EPA allows for 10% exclusion which many owners/managers use for retail space. Initially, DC disallowed such an exclusion, thus requiring building owners to include retail space when reporting building data.

For 2014, DC rule mirrored Federal requirement, allowing portion of property to be excluded from benchmarking report if it met following conditions.

- \* The property use and energy use patterns are significantly different than those of the rest of the building (for example: A restaurant or a gym in an office building);
- \* **The space is less than 10% of the building's gross floor area;**
- \* The space cannot be a type eligible to receive an ENERGY STAR score, nor be residential multifamily housing;
- \* The space's energy use is separately metered or sub-metered for all energy sources, so that both the space's floor area and total energy consumption can be excluded from the benchmarking report; and
- \* The building as a whole is eligible to receive an ENERGY STAR score.



# FEDERAL TENANTS

DC law requires building owners to request data from Federal tenants. What can/should be done about noncomplying Federal tenants?

DDOE regulations allow exemptions from the benchmarking regulations under certain conditions for good cause. Building owners with Federal tenants engaged in sensitive work (Ex. national security) can seek an exemption from the benchmarking requirements. NOTE! NOT AN AUTOMATIC EXEMPTION. OWNER MUST APPLY FOR A PUBLIC INTEREST EXEMPTION UNDER 20 DCMR 3511.2(b).

- 3511.1 The Director of the District Department of the Environment (DDOE) may, on a case by case basis, grant an exemption from any requirement of the Act upon showing of good cause by the applicant.
- 3511.2 Good cause for granting an exemption under subsection 3511.1 means one of the following:
- (a) Substantial evidence of a practical infeasibility or hardship in meeting a required green building standard;
  - (b) A determination that the public interest would not be served if the applicant had to comply with the requirement;
  - (c) LEED certification is not available for the building type that is subject to the Act's requirements; or
  - (d) The building subject to the Act's requirements is unoccupied.

# RECOMMENDATIONS: BUILDING OWNERS/MANAGERS

**Montgomery County Building Portfolio:** Identify the number of buildings that are subject to the County's benchmarking law. How many buildings are already using Portfolio Manager? For those that are not currently using Portfolio Manager, how familiar is key staff with using Portfolio Manager?

**Lease language:** May need to address benchmarking language in future leases.

**Contact utilities early for aggregate data:** Don't wait until reporting deadline is looming! It takes time for the utilities to process your request **and** those from the numerous other building owners subject to the benchmarking law.

**Communication/Education/training:** May need to educate property managers and building teams. Take advantage of training sessions and educational materials. Familiarize yourself and team with Portfolio Manager. Communicating and following up with tenants is also critical. **Educational materials for building teams:** DC owners/managers developed different protocols for preparing for the compliance date. Some, for example, developed their own FAQs and checklist for their building team.

# RECOMMENDATIONS: EDUCATION AND OUTREACH FROM MONTGOMERY COUNTY

- ❑ **AOBA commends the County for designating key staff and creating a website for answers to benchmarking questions.**
- ❑ **Tenant community:** Develop a pamphlet that can be disseminated to the tenant (including retail tenants) community. See, for example, [DC flier](#).
- ❑ **Develop informative educational materials:** For example, DDOE developed a list of Frequently Asked Questions and other useful documents in consultation with stakeholder community.
- ❑ **Training:** Develop County or market EPA training sessions to familiarize building owners with Portfolio Manager. (This was especially important for DC residential owners/managers. Still important in the County for those owners less familiar with Portfolio Manager.)
- ❑ **Determining compliance threshold:** Inform owners that a determination that a building is subject to the benchmarking requirement is based on information obtained from the Montgomery County real property tax records. The Montgomery County notification letter should advise building owners that believe that their building is not subject to the law (either at a given size threshold or not at all ) to contact Montgomery County and explain their situation.

# FOR MORE INFORMATION, PLEASE CONTACT:

## **W. Shaun Pharr, Esq.**

Senior Vice President of Government Affairs  
Apartment and Office Building Association

of Metropolitan Washington

1050 17<sup>th</sup> Street, NW, Suite 300

Washington , DC 20036

Phone: (202) 296-3390

Fax: (202)296-3399

E-mail: [SPharr@aoba-metro.org](mailto:SPharr@aoba-metro.org)



# The JBG Companies Energy Benchmarking

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SEPTEMBER 16, 2014

# JBG Benchmarking for Consumption Metrics – Jurisdictional Compliance / Certifications / Labels



JBG's corporate office in Chevy Chase has been ENERGY STAR labeled since 2009.



ENERGY STAR is best for

- Tracking consumption metrics.
- Earning recognition for superior performance with a known brand.
- Compliance with benchmarking and disclosure regulations.

## ENERGY STAR

- 2007 first JBG building earns ENERGY STAR label.
- Current ENERGY STAR Portfolio:
  - 20 buildings ENERGY STAR labeled.
  - Over 5 million SF
  - 45% of commercial portfolio.

# JBG Benchmarking for Cost Metrics – Property Owner Management and NOI Performance



## Utility Bill Management And Cost Metrics

2012 JBG started working with Ecova, a 3<sup>rd</sup> party service provider to track energy metrics.

- Regular monthly utility bill review.
- Upload data directly into ENERGY STAR.
- Rolling up portfolio cost and usage to compare year over year improvements.
- Monthly Sustainability and Energy Performance Project Status Report for Asset Management.

JBG property at 7200 Wisconsin earned the ENERGY STAR label for the first time in 2014.

# Energy Benchmarking Tools and Reports

Welcome JBG00012: Account Settings | Contacts | Help | Sign Out

ENERGY STAR Portfolio Manager®

MyPortfolio | Sharing | Planning | Reporting | Recognition

1025 Thomas Jefferson Street  
1025 Thomas Jefferson Street, NW Suite 160G, Washington, DC 20007 | Map It  
Portfolio Manager Property ID: 3306993 | Primarily: Office  
Year Built: 1984

Finish your application for ENERGY STAR Certification

ENERGY STAR Score (1-100)  
Current Score: 86  
Baseline Score: 71

Summary | Details | Meters | Goals | Design

- ENERGY STAR Portfolio Manager
- 3<sup>rd</sup> Party Dashboards
- Quarterly Utility Scorecards
- Internal Reports for Decision Makers

ecova

MY COMPANY | PAYABLES | REPORTS | ADMIN

SAVINGS  
Jun '13 to May '12

EXPENSE SNAPSHOT  
Jun '13 to May '12

USAGE OVER TIME  
Electric (kWh)

TOP 10 SITE EXPENSE

MY REPORTS

RECENT PAGES

JBG Commercial Scorecard  
December 2013  
Rosslyn Gateway North

	2012	2013	Change	2012	2013	Change	2012	2013	Change
Electricity	2,543,300	1,739,233	-29.3%	2,798,007	2,542,100	-8.9%	0.2501	0.2504	0.4%
Natural Gas	1,828,567	1,848,043	1.1%	47,200	48,870	3.5%	0.0001	0.0001	0.1%
Other Fees	0	0	0	0	0	0	0	0	
Water/Sewer	1,291,981	1,211,640	-6.2%	3,340	1,296	-27.6%	0.0153	0.01225	-6.5%
Total	5,663,848	3,798,916	-32.9%	2,848,207	2,691,266	-5.5%			

Electricity - Use (kWh) and Cost

Natural Gas - Use (Therms) and Cost

Water/Sewer - Use (kGal) and Cost

SUSTAINABILITY & ENERGY PERFORMANCE PROJECT STATUS REPORT  
4445 Willard Avenue  
June 2014

I. LEED EB-O&M STATUS

STATUS	COMMENTS
Anticipated Certification Date	June 2015 The building water efficiency credit sheet and the building energy audit have been completed.
Anticipated Certification Level	Silver Based on the water efficiency credit sheet we have determined that we will receive all the available points by replacing the restroom urinals to .5 GPM.

II. ENERGY STAR

PROPERTY ID	SCORE	LABEL	COMMENTS
3258367			
Current Score (This Month)	80	Renew Label	4/20/14
Previous Label Score	90	Previous Label	4/20/13
Changes to Attributes	Due to the 2013 changes to the Energy Star grading system, Chase Tower fell from a score of 90 to a score of 80.		

III. UTILITY BILL REVIEW

UTILITY ACCOUNT	CURRENT BILL USAGE	PRIOR YEAR USAGE	CURRENT COST	PRIOR YEAR COST	CURRENT BUDGET	NOTES
Electric (kWh)	355,073	360,263	\$47,885	\$45,555		
Natural Gas (therms)	N/A	N/A	N/A	N/A		
Water (kGal)	790	687	\$5,877	\$5,046		Increase due to the growing number of tenants in the building.

IV. ECOVA UTILITY PERFORMANCE SCORECARDS

KEY SCORECARD METRICS	CURRENT YEAR (as annualized)	PRIOR YEAR	TREND AND COMMENTS
Annual kWh / GSF	4.7851	4.3069	+9.7% change due to unusually long/cold winter.
Annual Therms / GSF	N/A	N/A	
Annual KGal / GSF	0.0061	0.0060	+2.0% change due to increased occupancy.
Annual Utility Cost GSF	\$0.7017	\$0.6089	+15.2% change due to increased occupancy.

# JBG Using Benchmarking Data to Gain Access to Utility Rebates and Incentive Programs



JBG property at One Choke Cherry has been ENERGY STAR labeled since 2009 and received LEED EB:O&M Silver Certification in 2013.

Applications for most incentive programs require consumption history.

- **\$180,000** in rebates on projects in DC.
  - \$750 – Variable Frequency Drive
  - \$60,000 - Boiler Controls
- **\$379,000** in rebates on projects in Montgomery County.
  - 3 parking garage LED lighting retrofit projects.
  - Covers up to 100% of cost.
- City of Rockville Tax Credit (LEED EB:OM)
- Required for LEED EB: O&M
- Custom rebates based on savings.

# Using Benchmarking Data for Improved Tenant Engagement



JBG property at 5635 Fishers Lane has been ENERGY STAR labeled since 2012.

## Communication Tool for Sharing Improved Building Performance

- Tenants/Occupants largest contributor to usage of energy in the building.
- Property Manager/Owner can encourage energy efficiency in tenant spaces and measure progress.
- Help with access to tenant data.
- Market recognizes ENERGY STAR brand as a leader in energy efficiency.



# Energy Use Data Access



## Enabling Commercial Customers to Take Action

Montgomery County Data Access Working Group

Presented by: Lorie Shellender and Manuel Vera  
September 16, 2014

# The Tools

- Interval electricity usage data
- Advanced Metering Infrastructure (“Smart Meters”)
- Third-party analytics software
  - Translate raw data into actionable information
  - Information on a single building or entire building portfolio
  - Current and historical usage reporting
  - Interactive facility location maps
  - Set corporate sustainability goals and track progress

## The Tools

- Energy benchmarking
  - EPA's Portfolio Manager
  - Electricity, Natural Gas and Water usage
  - Building attributes
    - Building type (office, hospital, K-12 school)
    - Hours of operation
    - Square footage
  - Normalized for regional weather
  - Benchmarking score (0 to 100)
  - Required in the District of Columbia for buildings over 50,000 sf, approximately 1,700 buildings
  - District Department of the Environment will publish benchmarking scores annually
  - Pepco worked closely with DDOE during the implementation of the benchmarking mandate
  - Pepco and DDOE are partners in the Better Buildings Data Accelerator program (US EPA)

# Current Methods to Access Pepco Usage Data

- Green Button Download
  - Available since 2012
  - Customers can access their data via My Account
- Green Button Connect
  - Data access was expanded in 2014
  - Enables machine-to-machine data transfer from Pepco to third-party applications
- CEO Online
  - Online portal available to approximately 4,000 commercial customers. Green Button capability
  - Capacity for additional 3,000 accounts
  - DC Government can access usage data for all its facilities, regardless of size

## Resource Advisor

- Developed by Schneider Electric
- Provides customers with direct access to their usage data
- Analysis capabilities
- Building owners/managers can retrieve whole-building, aggregate usage data
- Automated uploads of usage data into Portfolio Manager for energy benchmarking
- Available to DC users in Q4 2014
- Availability will be expanded in 2015 for Maryland customers

# The Challenge

- Give customers what they want, in a timely manner
- Includes building owners, who may not be customers of Pepco
- New billing system currently under development. Expected completion in 2015
- Unable to attach external systems during development
- Manual process for fulfilling usage requests
- Provide a single source of data access for customers and building owners

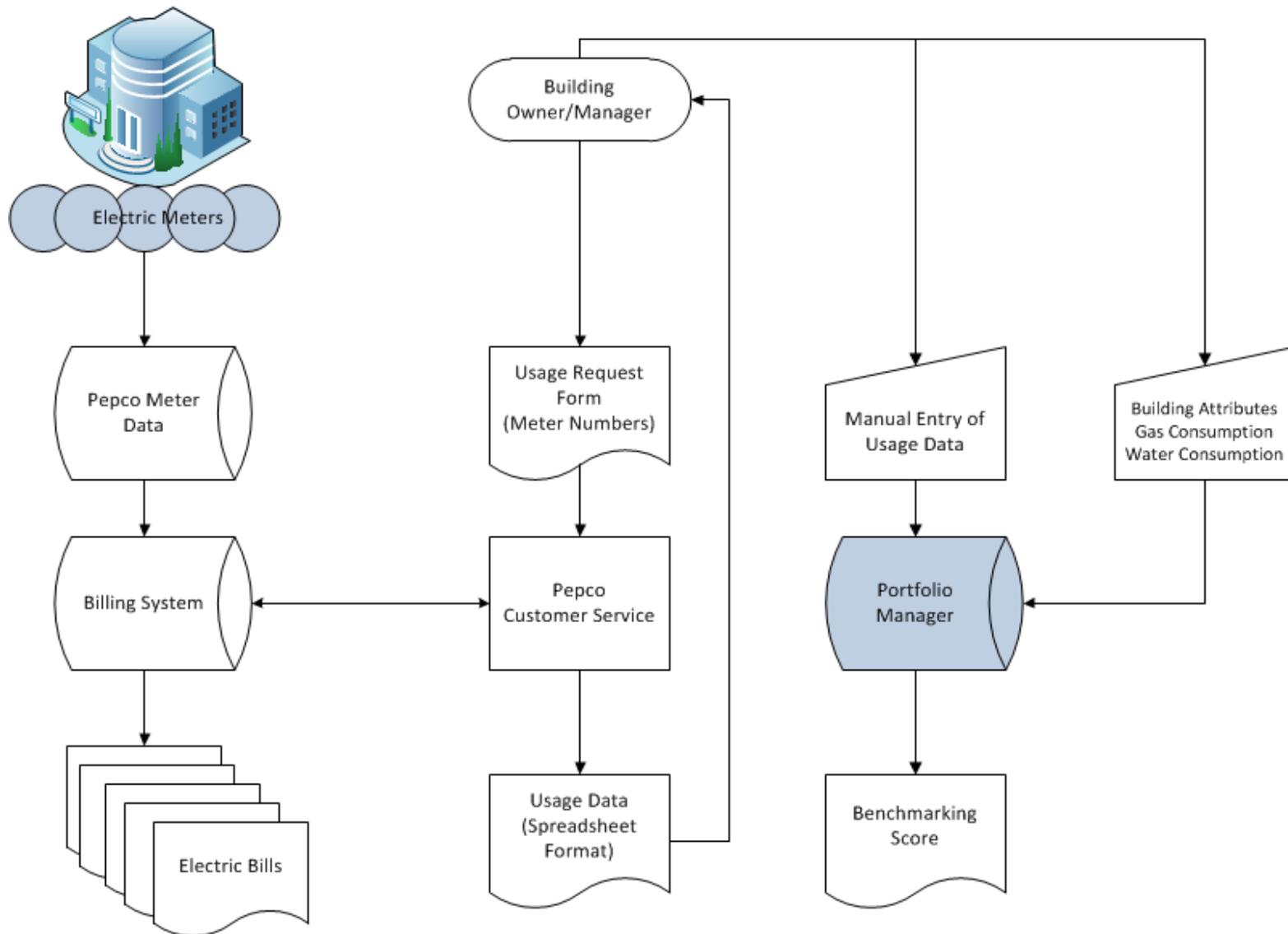
## Privacy Issues

- Strict policies to protect confidentiality of customer information. Includes usage data
- Written authorization from the customer of record is required
- Building owners (management firms) are often not the customer of record
- Impractical for building owners to obtain authorization from multiple tenants in a building

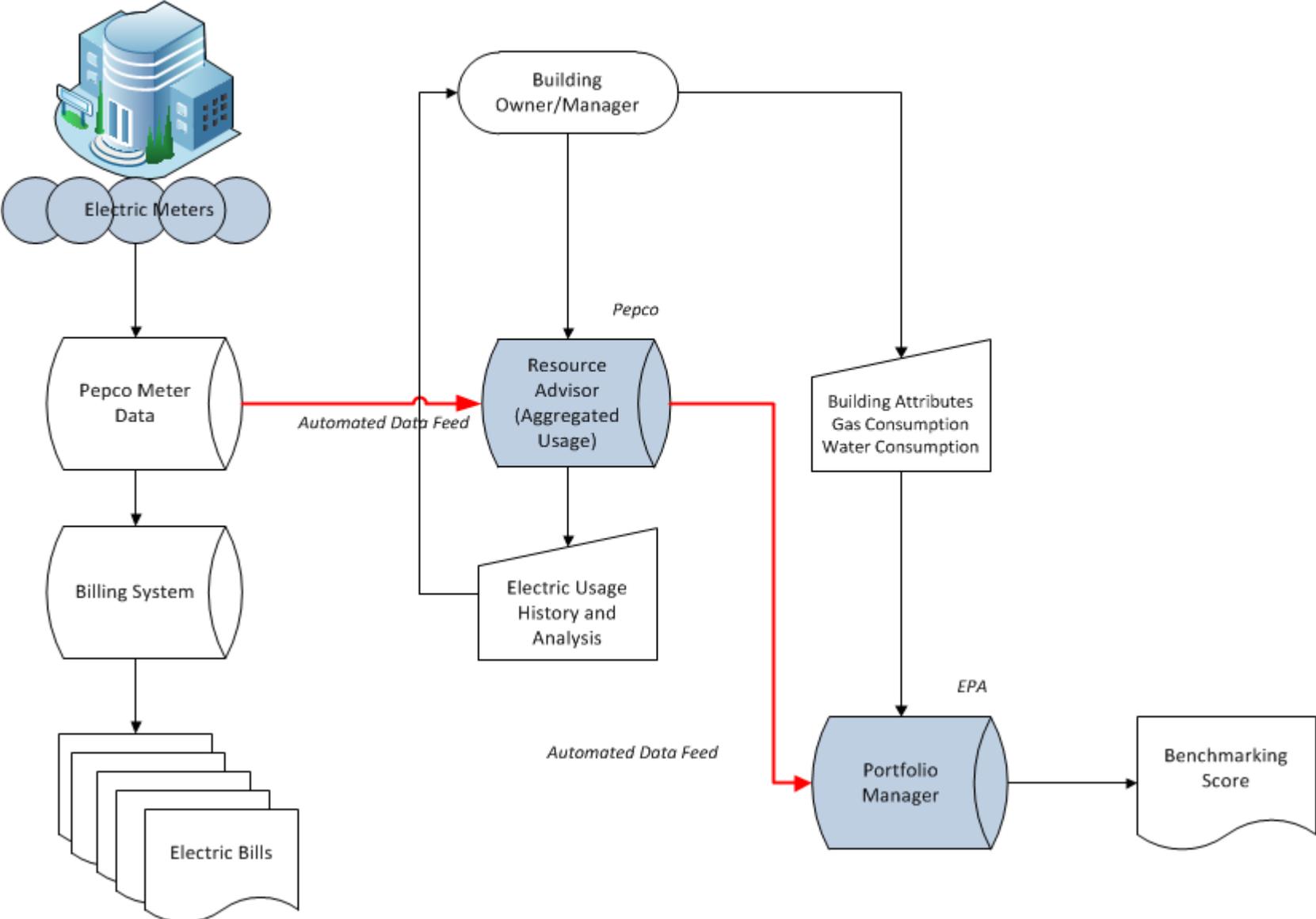
## Aggregate Building Data

- Provide aggregate building usage data without individual customer authorization
- Buildings with five (5) or more electric accounts
- Building owners are responsible for providing account identification
- Usage request form
- Submit Meter Number for each service connection

## Current Process



# Electric Usage Data Flow (Proposed)



# Contact Us

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# Thank You

# Agenda

- ✓ Overview of Bill 2-14 as adopted
- ✓ County benchmarking efforts
- ✓ Perspectives on benchmarking
  - JBG Energy Management
  - AOBA Government Affairs
  - Pepco Data Access and Automation
- Work group charter
  - Subcommittees

# The Bill: Work Group

## Work Group Charge

- Review the benchmarking process as applied to county-owned facilities
- Report to the County Council and County Executive with recommendations on the benchmarking process as applied to privately-owned facilities, including any proposed amendments to the County law.

*+ Advise, guide, and vet implementation approaches*

# Work Group Subcommittees

- **Technical assistance programming and resources**  
Implementation, programming, technical assistance, and resources.
- **Outreach and education**  
Outreach and communication strategies, venues and media, identifying partner organizations to support outreach.
- **Implementation guidance and legislative clarifications**  
Review the legislation and suggest clarifications and revisions.

**Please indicate your interest on the sign up sheets in the back. Emails will go out to coordinate meetings for each subcommittee.**

# Thank you!

## **Announcement: Upcoming Event**

### **Benchmarking Introductory Forum**

*For building owners and others interested in learning about the bill and how it applies to them*

November 6<sup>th</sup>, 2014 at 8:00-10:00am

(Coffee at 8:00, followed by presentation at 8:30)

Fitzgerald Theater, Rockville, MD

Hosted by USGBC-NCR Chapter, City of Rockville, and Montgomery County Chamber of Commerce

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#### **More Information:**

Benchmarking website: <http://montgomerycountymd.gov/DEP/Energy/benchmarking.html>