

COUNCIL OF THE CITY OF PHILADELPHIA
COMMITTEE ON THE ENVIRONMENT

Room 400, City Hall
Philadelphia, Pennsylvania
Tuesday, June 5, 2012
2:04 p.m.

PRESENT:

COUNCILWOMAN BLONDELL REYNOLDS-BROWN, CHAIR
COUNCILMAN JAMES KENNEY, VICE-CHAIR
COUNCILWOMAN JANNIE BLACKWELL
COUNCILMAN CURTIS JONES, JR.
COUNCILWOMAN MARIA D. QUINONES-SANCHEZ

BILL: 120428

1 benchmarking and reporting of energy and water
2 usage data for certain buildings, all under
3 certain terms and conditions.

4 COUNCILWOMAN REYNOLDS-BROWN: Thank you.
5 This Committee now on the Environment is now a
6 Public Hearing to hear testimony on Bill NO.
7 120428.

8 It's the belief that information is power.
9 When we have information, we for sure make
10 different choices. Many would ask, including
11 members of the Coalition For an Energy Efficient
12 Philadelphia, would ask why now. And I quote
13 from their literature:

14 "There is no time like the present to
15 become more energy efficient. As energy prices
16 continue to rise, energy independence becomes
17 increasingly critical to our City's economic
18 vitality."

19 So in short, this Bill aims to provide all
20 parties with the tools needed to make informed
21 decisions toward our collective goal, which is
22 reduced energy consumption, typically equals
23 cost savings. I would be remiss not to thank
24 and acknowledge the Coalition For an Energy

1 Efficient Philadelphia, the energy professionals
2 and advocates have met with my office over the
3 past year.

4 As is our custom, we meet with all sides.
5 A special thank you to Leslie Cook from the
6 United States Environmental Protection Agency
7 and Andrew Burr from the Institute for Market
8 Transformation who are here today from our
9 nation's capital. We would say welcome to the
10 City of Brotherly Love and Sisterly Affection.
11 Others might say Sisterly Effectiveness.

12 We would also be remiss not to acknowledge
13 and say thank you to Don Haas and Rich McClure
14 and all of the members of BOMA who allowed my
15 staff and I to come and provide with you
16 background on this bill.

17 Today, with the successful passage of this
18 legislation, our City will join a short list of
19 states. Five years ago in 2007, the State of
20 California led with this new activity. Two
21 years later Washington State passed similar
22 legislation. Today, we hope to join Austin who
23 put a measure like this in place in 2008, the
24 District of Columbia in 2008 and New York City

1 who instituted legislation in 2009 due to become
2 effective in 2014.

3 The one big elephant in the room is that in
4 this community there is a feeling and a strong
5 concern that not all is done to ensure that all
6 communities are participating. Efforts like
7 this only work when we figure out how such
8 initiatives can work for all communities. And
9 so I quote, "Another large concern is that
10 minority businesses are not even at the table,
11 much less creating revenue from any of the green
12 initiatives in the city or from ARRA Funds."

13 So, it is the hope of myself and members of
14 this Committee and Members of Council that going
15 forward efforts are made and initiatives are
16 taken by both the leadership and the membership
17 to make sure that all sectors of Philadelphia
18 are at the table when we are discussing green
19 and sustainability matters.

20 Lastly, based on the number of meetings and
21 concerns that were addressed at a number of
22 different meetings, we are offering amendments
23 today. They are as follows.

24 On page one of the Bill, the first

1 amendment changed the size of the commercial
2 building to be covered from 25,000 square feet
3 to 50,000 square feet.

4 Also on page one of the Bill, the second
5 amendment again changes the size of the
6 commercial building that would be covered from
7 25,000 square feet to 50,000 square feet.

8 On page two, the third amendment clarifies
9 how the building information can be submitted.

10 On the top of page three, the fourth
11 amendment clarifies the parts of the building
12 that ought to be covered under this ordinance.

13 And the middle of page three, the fifth
14 amendment clarifies regulations related to the
15 bill and waiver authority for the bill.

16 We may be indeed working on a final
17 amendment to change the effective date so that
18 those communities and organizations that are
19 affected get a full year to move towards
20 honoring the attendance of this legislation.

21 So again, I thank all of you for being
22 here. And please know, understand and recognize
23 that we want to hear what everyone has to say.
24 That's the good news. The bad news is that we

1 have a three o'clock Committee of the Whole;
2 wherein, we have a number of other tough issues
3 to reckon with. So, we are appealing to you to
4 honor our request and to limit your testimony to
5 three minutes.

6 With that, we will start with our first
7 panel. And we invite to the witness table
8 Members of the Administration, Leslie Cook from
9 the United States Environmental Protection
10 Agency and Alex Dews, Mayor's Office of
11 Sustainability. If we could please move forward
12 to the table. And if we could please ask Doug
13 Hoffman of Brandywine Realty Trust and BOMA to
14 be prepared to move to the second panel.

15 And with that, we welcome you to these
16 Hearings and ask you to please offer your
17 testimony. State your name for the record.

18 MR. DEWS: My name is Alex Dews, Mayor's
19 Office of Sustainability.

20 Good afternoon, Chairwoman Reynolds Brown,
21 Vice Chairman Kenney and Members of the City
22 Council Committee on the Environment. I am Alex
23 Dews, Policy and Program Manager for the Office
24 of Sustainability. I'm here to testify in

1 support of Bill No. 120428, which provides for
2 benchmarking and reporting energy and water
3 usage data for large commercial buildings in
4 Philadelphia. I'd like to thank Chairwoman
5 Reynolds Brown for her commitment to
6 sustainability issues and leadership on
7 promoting energy efficiency in Philadelphia with
8 this bill.

9 The Mayor's Office of Sustainability is
10 responsible for implementation of Greenworks
11 Philadelphia, the City's Comprehensive
12 Sustainability Plan. Greenworks sets measurable
13 goals in the area of energy, environment,
14 equity, economy and engagement. Bill No. 120428
15 supports several of these objectives including
16 energy conservation, reduced greenhouse gas
17 emissions and improved air quality.

18 Over the past two years, we followed the
19 growing trend of building energy benchmarking
20 and disclosure policies in other cities and have
21 been in close contact with our peers in New
22 York, Seattle and San Francisco to learn from
23 their experiences and to see whether energy
24 benchmarking makes sense for Philadelphia.

1 Understanding that there are common challenges
2 to driving energy efficiency, its scale in all
3 cities, we feel that energy benchmarking and
4 disclosure is an important tool to advance
5 energy efficiency in the commercial real estate
6 market here in Philadelphia.

7 Data tracking and reporting are both
8 essential to the success of Greenworks
9 Philadelphia. In the three years that we've
10 been implementing the plan, we've measured
11 progress on 15 targets and over 150 initiatives
12 learning a great deal along the way. The energy
13 section of Greenworks sets a goal to reduce
14 City-wide building energy use 10 percent by
15 2015.

16 Energy efficient building construction and
17 renovation have expanded significantly in
18 Philadelphia since Greenworks was released in
19 2009. One indicator of this trend is that the
20 number of Energy Star and LEED certified
21 buildings has increased substantially. And
22 energy efficiency market continues to get
23 headway under public programs such as Energy
24 Works, utility programs such as PGW's Energy

1 Sense and PECO's Smart ideas, and private
2 businesses focused on energy solutions. The
3 collective results are helping to build
4 awareness and action around energy efficiency;
5 but unfortunately, have not been enough to
6 offset an overall increase in 13 percent in
7 City-wide building energy use between 2006 and
8 2010. The most recent time frame for which this
9 data is available.

10 Increased building energy use is not unique
11 to Philadelphia but is occurring across the
12 country. Extreme weather was a major factor
13 here in Philadelphia, but even after normalizing
14 for that there is a notable increase. We
15 believe that the slow economy has had a
16 surprising impact on energy use as well with
17 constrained budgets, building owners have
18 postponed equipment upgrades and repair. And
19 these delays ultimately result in less efficient
20 operations. This is a scenario not unfamiliar
21 to city government, which has faced similar
22 operations in maintenance challenges.

23 Commercial and industrial buildings which
24 now represent more than half of total building

1 energy use in Philadelphia were the primary
2 cause of the 13 percent increase. More than 60
3 percent of greenhouse gas emissions come from
4 Philadelphia's buildings, twice the rate of the
5 transportation sector. It's clear that in order
6 to see a meaningful reduction in City-wide
7 energy use and related greenhouse gas emissions,
8 we have to address commercial buildings.

9 Improving the resiliency of the City's
10 aging building stock increases its value in
11 regional competitiveness. And avoiding the cost
12 of wasted energy means more dollars going into
13 the local economy. Energy efficiency solutions
14 are often simple, affordable and accessible but
15 only when the people who manage, own and rent
16 those buildings are aware of their energy
17 performance. As the largest property holder in
18 Philadelphia with a portfolio of more than 600
19 buildings, energy efficiency presents a big
20 challenge but also an enormous opportunity for
21 city government.

22 Benchmarking building energy use is proving
23 to be an effective energy education and
24 management tool already. Accurately tracking

1 energy use over time is a good practice. But
2 using EPA's free Portfolio Manager Tool to
3 benchmark a fire station or a recreation center
4 against a national database of similar
5 buildings, comparing apples to apples, provides
6 far greater insight into how well an individual
7 building is performing and where the greatest
8 opportunities are for savings across the City's
9 Building Portfolio.

10 Over the past several months, our office
11 has begun benchmarking all city facilities over
12 10,000 square feet, a total of 183 buildings,
13 using Portfolio Manager. We will publish an
14 annual report with the building profiles and
15 scores beginning in the fall of this year. Some
16 building owners are becoming more sophisticated
17 about energy use, but many still consider energy
18 a fixed cost that they can't control.

19 The first step toward managing energy use
20 in buildings is understanding demand. The
21 Portfolio Manager, which is the industry
22 standard tool uses a series of simple inputs
23 along with utility data to score building energy
24 performance relative to other buildings of

1 similar size, occupancy and use providing owners
2 and managers with much more information than
3 what they get on utility bills. A building with
4 good energy management practices is good for
5 tenants, owners, taxpayers and the broader
6 community.

7 The Mayor's Office of Sustainability
8 supports benchmarking and disclosing energy use
9 as a positive approach to making Philadelphia an
10 energy efficient city.

11 Thank you for this opportunity to testify
12 regarding this bill. I will be happy to respond
13 to any questions at this time.

14 COUNCILWOMAN REYNOLDS-BROWN: We thank you.
15 And we will hear from Leslie Cook before we open
16 it up for questions. Welcome.

17 MS. MS. COOK: Thank you. My name is
18 Leslie Cook. I'm a Program Manager with the
19 U.S. Environmental Protection Agency's ENERGY
20 STAR Commercial Buildings Program.

21 Chairwoman Reynolds Brown, Vice Chair
22 Kenney and Members of the Committee, thank you
23 for this opportunity to provide our
24 informational perspective on this proposed bill.

1 First, please note that my appearance today
2 to testify on behalf of EPA does not serve as an
3 endorsement of the proposed legislation but
4 rather is intended to provide an informational
5 testimony about the value of benchmarking in
6 commercial buildings as well as the capabilities
7 of the ENERGY STAR Portfolio Manager Tool has
8 proposed in the bill.

9 Energy efficiency offers one of the lowest
10 cost solutions for improving energy,
11 reliability, security, reducing our energy bills
12 and addressing the important issue of global
13 climate change all while helping to grow the
14 local and national economy.

15 Now celebrating 20 years since its
16 inception in 1992, the ENERGY STAR Program has
17 helped individuals and organizations nationwide
18 find effective energy efficient solutions. And
19 Americans, with the help of ENERGY STAR, has
20 prevented about 210 million metric tons of
21 greenhouse gas emissions in 2011 alone,
22 equivalent to the annual emissions from
23 approximately 41 million vehicles and saved
24 nearly 23 billion on their utility bills. And a

1 lot of those accomplishment are from strong
2 partnerships with cities like Philadelphia.

3 For the decade, through ENERGY STAR, we
4 have worked with tens of thousands of building
5 owners and managers to reduce energy use in
6 buildings. Using the lessons we have learned
7 working with these individuals who are on the
8 front lines in addressing our nation's energy
9 challenges, EPA tailors easy to use cost
10 effective and cost free tools through the ENERGY
11 STAR Program to help businesses and
12 organizations reduce energy waste in buildings.

13 We provide objective information for
14 buildings of all types, all sizes and all
15 functions. And our tools are used by states,
16 local governments, offices, hospitals, schools,
17 retailers, hotels, congregations and many others
18 across the country. The cornerstone of the
19 ENERGY STAR Program is for buildings that you
20 can't manage what you don't measure.

21 And our experience has shown in the many
22 building owners and operators simply don't have
23 a true understanding objectively of just how
24 much money they are spending on their energy

1 bills and don't know if energy use is high or
2 low for that type of building operation. But
3 our experience has also shown that once people
4 are armed with this type of information, as a
5 result of benchmarking, many will act on that
6 information. And in the City of Philadelphia,
7 the desire to act will lead them not back only
8 to ENERGY Star and other available resources
9 nationally, but to regional utility providers
10 and local businesses to assist them in improving
11 their energy performance.

12 EPA has developed this Portfolio Manager
13 Tool to assist building owners and managers and
14 measure and assess energy use in a standardized
15 way. Portfolio Manager is the interactive cost
16 free, energy management software tool that is
17 proposed in this Bill. That's the mechanism by
18 which building owners in Philadelphia will
19 benchmark their buildings' energy use.

20 Like we said, it's a free tool that allows
21 users to assess and track their energy and water
22 consumption for a single building and also
23 across their entire portfolio. Once a building
24 owner has collected just 12 months of utility

1 data and a few very basic pieces of information
2 on their data, benchmarking is a simple exercise
3 that can take as little as 15 minutes for one
4 building. And for those with large portfolios
5 of buildings, we have many options for bulk data
6 upload and large data management options.

7 Furthermore, for this Bill's perspective,
8 there is also flexibility for building owners to
9 share with their tenants and customers and the
10 general public. There is a flexibility
11 functionality built into the tool for building
12 owners to share their results electronically
13 through an online feature which may streamline
14 the reporting process and could be helpful in
15 the implementation of this proposed bill.

16 There is over 2,070 buildings across the
17 nation -- I'm sorry, 270,000 buildings across
18 the nation have benchmarked in Portfolio
19 Manager. That number has grown by 40 percent
20 over the past year. Locally here in
21 Philadelphia, 6,000 buildings in the area have
22 already been using the tool. And that's a 30
23 percent increase from 2010 to 2011. So,
24 clearly, this market is really adopting this

1 tool as our other companies nationwide.

2 So, I also wanted to point out that we have
3 made functionality improvements to Portfolio
4 Manager to allow service providers and utility
5 providers to help streamline the process through
6 data availability with automatic data upload.
7 Currently, there are over 50 organizations that
8 provide that service to building owners either
9 through their services as part of their energy
10 performance contracting, for instance, or it's a
11 utility providing that to their customers.

12 With the passage of this Bill, Philadelphia
13 would join a number of other cities and states
14 that have chosen to use Portfolio Manager in
15 this way. In 2011 alone the first reporting
16 here in New York City, they collected 16,000
17 buildings as part of their first annual
18 reporting. So, this has been a tested use of
19 the tool.

20 So in closing, benchmarking energy use of
21 commercial buildings is a critical first step in
22 the path to superior energy efficiency. And the
23 Committee is to be commended for identifying
24 existing buildings as a major opportunity to

1 reduce energy consumption. And we appreciate
2 the opportunity to provide our informational
3 perspective. Thank you very much.

4 COUNCILWOMAN REYNOLDS-BROWN: Questions for
5 Members of the Committee? Thank you for making
6 the trip. And we appreciate the leadership that
7 our Administration has shown consistently from
8 day one around the issue of the environment and
9 sustainability.

10 Speak briefly, if you will, to how you help
11 hotels? Concern has been raised about hotels.
12 I know they are listed in your ENERGY STAR
13 building designation. So, how can we help
14 hotels understand that this is a right and
15 appropriate way to go?

16 MS. COOK: Sure. Hotels and Hospitality
17 Industry is just one building type. Any
18 building type can use the tool. Any building
19 type can use the tool to measure their energy
20 performance, track their changes, improvements
21 over time, track their cost on greenhouse gas
22 emissions.

23 Hotel is one of the space types that can
24 earn the 1 through 100 score through

1 benchmarking and Portfolio Manager.

2 COUNCILWOMAN REYNOLDS-BROWN: Okay.

3 MS. COOK: We have many hotels across the
4 country, many national organizations that are
5 using the tool in that industry and finding
6 success. In fact, a number of hotel owners and
7 managers were recognized recently in March in a
8 National ENERGY STAR Partner of the Year Award
9 Ceremony. We have got lots of success coming
10 out of that sector.

11 COUNCILWOMAN REYNOLDS-BROWN: Okay then.
12 That's very helpful to know.

13 MS. COOK: Sure.

14 COUNCILWOMAN REYNOLDS-BROWN: We need to
15 pass that on to one of our constituents and
16 stakeholders who had legitimate concerns about
17 that particular industry.

18 MS. COOK: And we will be happy to talk
19 further with them.

20 COUNCILWOMAN REYNOLDS-BROWN: Terrific. So
21 we need to make sure that that link happens.
22 Thank you both for your testimony.

23 With that we'll ask, please, Mr. Doug
24 Hoffman, Brandywine Realty Trust, to step

1 forward. And we want to ask Panel Three to
2 prepare. That includes Michael Murray of
3 Nightingale Realty and John J. McCullough of Ten
4 Penn Center.

5 Good afternoon. Welcome.

6 MR. HOFFMAN: Good afternoon. Thanks very
7 much. Madam Chair, Members of the Committee, my
8 name is Doug Hoffman. I am President of BPG
9 Management Company. I'm here today in my
10 capacity as the Chair of the Building Owners and
11 Managers Association of Philadelphia commonly
12 referred to as BOMA. I'd like to thank you and
13 the entire Committee for giving me the
14 opportunity to testify today on this Bill.

15 As you may know, BOMA is a nonprofit
16 organization whose members provide within the
17 city limits alone over 51 million square feet of
18 office space for over a half a million office
19 workers conservatively valued at near \$20
20 billion. Member buildings include virtually all
21 of the major high-rise office towers in the
22 city. Our member buildings not only define the
23 Philadelphia skyline and add character to the
24 city, but are a tremendous economic driver for

1 the city and the region.

2 I would like to state clearly at the outset
3 that energy efficiency and sustainability are of
4 the utmost importance to BOMA Philadelphia and
5 its member buildings. As a civic-minded
6 organization, BOMA stands ready to endorse those
7 courses of action to promote the City and the
8 Greater Philadelphia region as a safe, positive
9 and forward looking community. Natural
10 resources, regardless of cost, should never be
11 wasted. We are proud to collaborate with the
12 City and other organizations as we strive to
13 earn the moniker, "The Greenest City in
14 America."

15 I would also be remiss if I did not thank
16 you for your coalition building method in
17 developing a legislation before us today. It is
18 BOMA Philadelphia's pleasure to work with you
19 Councilwoman, your legislative aide Katherine
20 Gilmore, the Mayor's Office of Sustainability
21 and the Delaware Valley Green Building Council.

22 While Bill 120428 is well intentioned and
23 BOMA Philadelphia supports various facets of the
24 Bill, we are nevertheless concerned about the

1 impact of certain features of the legislation
2 and how it would adversely effect certain owners
3 of real estate. That being said, I've broken my
4 testimony into three distinct parts. The first
5 being benchmarking, the second being disclosure,
6 and the third addressing compliance and
7 technical issues.

8 First, BOMA Philadelphia is supportive of
9 benchmarking. As an industry, our members are
10 by and large extremely competitive. They
11 constantly seek to understand how their assets
12 perform relative to other properties in their
13 respective market class. We are always looking
14 for differentiators which set our properties
15 ahead of the competition. And those
16 differentiators tend to be things that are
17 exploited.

18 In fact, for many years, BOMA has had the
19 Experience Exchange Report which enables owners
20 and managers of properties to confidentially
21 share their detail operating data in exchange
22 for a complete analysis prepared by BOMA. Not
23 only has this tool highlighted the strengths of
24 the property, but equally important has shown

1 owners and managers the focus upon for financial
2 and operating efficiencies.

3 In short, benchmarking is an integral part
4 of the areas commercial real estate community.
5 It is one of the available tools that enables us
6 to operate our buildings more efficiently;
7 thereby, attracting and retaining tenants who
8 are seeking quality buildings in which to
9 conduct business.

10 Further, by voluntarily pursuing
11 certification such as ENERGY STAR, LEED and
12 BOMA's 360 Designation, our members seek to
13 demonstrate their leadership, thereby, marketing
14 their advantage. The formerly surveyed, I would
15 suspect that 80 to 90 percent of BOMA member
16 buildings have already benchmarked their
17 properties utilizing the EPA's Portfolio Manager
18 Tool.

19 While Portfolio Manager is not without
20 flaws, if data is properly inputted, it enables
21 property owners to benchmark their property
22 effectively and to understand on a scale of 0 to
23 100 how their property performs relative to
24 national norms. It also enables operators of

1 buildings to put new operating strategies to the
2 test in order to understand if they move the
3 proverbial needle.

4 BOMA Philadelphia understands that
5 benchmarking is a nuanced process. While a
6 building's tenants may, in fact, have the
7 greatest impact on the building's overall energy
8 score, it's the buildings be rated and
9 effectively labeled. Furthermore, the Portfolio
10 Manager Rating is, in many instances, simply a
11 number. A number does not always tell the whole
12 story. Indeed, the Portfolio Manager Rating is
13 only one indication of a building's overall
14 energy efficiency.

15 A building with a rating of 65 may very
16 well be more efficient than one that has an 80
17 rating. Simply, no two buildings are alike.
18 Building construction and internal systems can
19 vary greatly within a comparison class. In
20 fact, it is not uncommon for LEED certified
21 buildings to not be eligible or qualify for
22 ENERGY STAR certification.

23 If Bill No. 120428 is intended to enable
24 tenants and/or users to make educated and

1 informed decisions, then the disclosure must
2 facilitate the sharing of truly meaningful and
3 complete information. Education of tenants as
4 well as building owners will provide for a more
5 effective improvement in energy consumption.
6 The key to sustainability is profitability.

7 Insofar as disclosure is concerned, given
8 the aforementioned issues and the ratings are
9 greatly influenced by a building's tenants and
10 their use of the space, BOMA Philadelphia cannot
11 support a public disclosure vehicle that
12 penalizes a building based on its occupants.
13 This is not like the City's menu disclosure or
14 fuel efficiency label on a vehicle. In both
15 those cases, the chef or the automobile
16 manufacturer controls all the ingredients or
17 components. When it comes to Portfolio Manager
18 and benchmarking, a building owner only controls
19 a fraction of the total score rating.

20 While other markets across the country have
21 either adopted or are considering benchmarking
22 and disclosure laws, the true impact of
23 disclosure is not yet known. The notion of
24 shaming and/or penalizing a building because of

1 its energy score potentially forcing a tenant or
2 a building owner to invest capital dollars that
3 it might not have, can have devastating and
4 unintended consequences? As written, the Bill
5 can easily and unjustifiably apply a Scarlet
6 Letter to the building.

7 Picture a Class B or Class C property or
8 even a Class A property, which is struggling
9 with vacancy issue, low rents, rising taxes and
10 operating expenses now. Then consider that
11 tenants may opt not to move into or worse yet
12 move out of that building because of a rating
13 that is outside of an owners' control.

14 An example would be a law firm which has
15 not a lot of computers, mostly office workers
16 with a company that manufacturers or services
17 computers who has a great electrical draw.
18 These things are sometimes outside of an owners
19 control. These can be the same tenants that
20 cause the low score. Under such circumstances,
21 we believe the values would be negatively
22 impacted which will in turn negatively impact
23 the City's tax base.

24 Sharing ENERGY STAR scores as well as

1 information about a building's sustainable
2 practices are the norm when responding to
3 request for proposals for a tenant. This
4 currently happens in a voluntary way. Mandating
5 the sharing of this information with a
6 perspective tenant would be redundant.
7 Compliance with the requirements of a Bill such
8 as 120428 is also a nuanced process. As
9 mentioned previously, the thought of marking a
10 building with the Scarlet Letter is extremely
11 problematic.

12 As a policy matter, BOMA Philadelphia does
13 not object to providing or sharing Portfolio
14 Manager Data to the City in an aggregate form
15 for the purpose of understanding how the
16 commercial sector is doing relative to the
17 Administration's established energy goals. But
18 that sharing comes with a request of this type
19 of property-specific data not be disclosed or
20 shared with the public. Rather than using the
21 energy data collected from Portfolio Manager to
22 publicly disclose or list buildings throughout
23 the City, potentially embarrassing some owners
24 including the City, BOMA suggests that the

1 information be used in a positive fashion.

2 As we see it, the City in concert with BOMA
3 and the DVGBC could collectively acknowledge the
4 champions or leaders. The Vision is an event
5 recognizing the top tier buildings or those
6 buildings that move the proverbial needle the
7 furthest in any given year. It is this type of
8 positive strategy that would encourage the
9 commercial sector. Buildings owners and
10 managers and tenants alike to pursue energy
11 efficiency that will contribute to the City's
12 overall economic vitality. It could go a long
13 way towards promoting such efficiency as a
14 Citywide goal and encouraging all members of the
15 community to do their part to turn the ideal
16 into a reality.

17 With respect to some of the technical and
18 language based concerns not addressed in this
19 testimony, that would be provided under separate
20 cover.

21 I would like to thank you again for the
22 opportunity to provide this testimony today.
23 Through our Codes and Legislation Committee we
24 hope to continue working with you on a bill that

1 results in a win for all parties. I would be
2 happy to address any specific questions you may
3 have. Depending on the nature of any questions,
4 I may invite our committee chairs to join me in
5 response.

6 COUNCILWOMAN REYNOLDS-BROWN: First, let me
7 thank you for your informative and very
8 instructive testimony. And I do have a couple
9 of questions, but we will first hear from the
10 Majority Leader Curtis Jones.

11 COUNCILMAN JONES: Thank you, Madam Chair.
12 And I'll be brief cause you have an ambitious
13 agenda.

14 Could some of the -- as I understand what
15 you said, some of them could be -- well, let me
16 back up. The problem is comparing apples to
17 oranges by way of building sizes. You gave the
18 example of a manufacturing company that has a
19 high electrical use versus a law office that may
20 not.

21 And in -- is your testimony to say that we
22 couldn't batch different types of buildings,
23 classify them in a way that gave a
24 apples-to-apples comparison or something else?

1 Is that the number one concern you have? I took
2 that from your testimony.

3 MR. HOFFMAN: Yeah. Thank you. You want
4 to answer?

5 MR. HAAS: Thank you.

6 COUNCILWOMAN REYNOLDS-BROWN: State your
7 name for the record.

8 MR. HAAS: Donald Haas. One of the
9 limitations of Portfolio Manager is it groups
10 all the different buildings into 15 different
11 sectors presently; hotels being one of them,
12 office buildings. And it's grouped by size, but
13 they are averages. You can have a central plant
14 system still in a same category as a distributed
15 plant system where you have a different HVAC
16 system. The building exterior could be of a
17 different composition which, one, may be more
18 efficient than another.

19 Again, it's an indicator. But you could
20 have two buildings in the same classification at
21 the opposite ends of the scale. That's where
22 the exact comparison can run into problems.

23 COUNCILMAN JONES: Well, I mean, I think
24 the purpose of this is to do those very

1 comparisons that you mention. And my thing I do
2 agree with you on, it's not an idea of giving a
3 building a Red Scarlet Letter. It's more to say
4 these are challenges that this building has and
5 over time can overcome.

6 And I think -- doesn't the natural
7 consumption of energy drive you to want to do
8 these things anyway because you want to maintain
9 a bottom line that is competitive with other
10 businesses similar to yours?

11 MR. HAAS: Correct. ENERGY STAR
12 certification is 75 or above presently. You
13 have a number of high quality buildings in the
14 City of Philadelphia, large high-rise buildings,
15 that can't achieve that energy score through no
16 fault of their own. They have done -- any of
17 the energy conversions that they have done on
18 the base building systems, but they don't
19 control -- none of us control what our tenants
20 do within their space either through
21 construction or operation.

22 So, that's our -- probably our greatest
23 concern is that Scarlet Letter, that low energy
24 score, is in no way indicative of the building

1 owners' willingness or even economic power to
2 change that. There is no way they can do it
3 when the tenants actually control the lion share
4 of the energy consumption.

5 A tenant fits out an office space. They
6 typically get a tenant allowance as part of
7 their deal. How they spend that money -- we
8 don't tell them they have to spend it in energy
9 upgrades. They are free to virtually spend that
10 money within constraints on fitting their space
11 out however they see fit. So, it's not
12 necessarily on the tenants' mind energy
13 efficiency. They are the ones paying the bill.

14 MR. HOFFMAN: Some of the expense for
15 electric for a tenant, a certain tenant -- I'm
16 sorry, certain tenants depending on their use
17 can run electric expense at 3 or 4 or 5 dollars
18 a foot compared to what I mentioned before.

19 If you have a law firm that has lawyers
20 that work there. It's intellectual brain power
21 versus electric consumption a little bit, no
22 offense intended. I'm sorry. You know, so you
23 can get a firm that uses much less electric,
24 that costs much less. But what Mr. Haas had

1 just said was if the rating is publicly
2 disclosed and it just says one thing without any
3 background, it can be misleading to somebody
4 looking at it.

5 COUNCILMAN JONES: Well, I am going to have
6 to excuse myself, Madam Chair. President wants
7 to pull us in in small groups about some
8 matters.

9 COUNCILWOMAN REYNOLDS-BROWN: We will get
10 you on the back end.

11 COUNCILMAN JONES: And so, I will come
12 back. But I will be listening. I find this
13 intriguing. And the one thing I learned from
14 government is that everyone doesn't see
15 everything with the same lens. But I do know if
16 it isn't measured, it isn't managed. And, you
17 know, I wrestle with trying to impose
18 regulations versus trying to encourage
19 improvements.

20 COUNCILWOMAN REYNOLDS-BROWN: Sure.

21 COUNCILMAN JONES: So, thank you for your
22 testimony.

23 MR. HAAS: Thank you. And we are fully
24 supportive of benchmarking.

1 COUNCILWOMAN REYNOLDS-BROWN: Make that
2 clear. So, the last page of your testimony --
3 and I quote with respect to some of the
4 technical and language based on concerns not
5 addressed in this testimony, we want to -- we,
6 my office, want to sit with you and Mr. Lews to
7 review how we get to the goal in the way that
8 Councilman Jones just articulated.

9 Because just in having offline conversation
10 here, it appears to me from where I sit that
11 there is still room for the operative word in
12 this body is compromise. So, we want to have
13 further discussion about that which could equal
14 potentially an additional amendment after I
15 speak with the Mayor's Office of Sustainability,
16 okay?

17 MR. HAAS: Thank you, Councilwoman.

18 COUNCILWOMAN REYNOLDS-BROWN: You're very,
19 very welcome.

20 MR. HOFFMAN: Thank you.

21 COUNCILWOMAN QUINONES-SANCHEZ: Can I --

22 COUNCILWOMAN REYNOLDS-BROWN: I'm sorry.
23 Councilwoman, Maria Quinones-Sanchez. Please,
24 gentlemen, please be reseated.

1 COUNCILWOMAN QUINONES-SANCHEZ: I am sorry.
2 Just kind of to add with what Councilwoman
3 Blondell Reynolds-Brown was talking about, you
4 listed seven items of concern to you.

5 Were they in priority order as you
6 submitted them here are? Or of these seven
7 items, which are the two, three that you believe
8 make this Bill, yeah.

9 MR. HAAS: On the technical issues,
10 Councilwoman?

11 COUNCILWOMAN QUINONES-SANCHEZ: Yes,
12 please.

13 COUNCILWOMAN REYNOLDS-BROWN: State your
14 name for the record. Welcome.

15 MR. MCCLURE: They are actually address --

16 COUNCILWOMAN QUINONES-SANCHEZ: You got to
17 state your name for the --

18 MR. MCCLURE: Rich McClure, BOMA
19 Philadelphia.

20 They are actually in the order of -- as
21 they appear in the ordinance. We sort of, yu
22 know, two refers to subparagraph --

23 COUNCILWOMAN QUINONES-SANCHEZ: That's why
24 I wanted to ask you of the seven, because they

1 are quite extensive, what are the one, two,
2 three top items for you that --

3 MR. MCCLURE: Again, just big picture,
4 disclosure is our big -- big issue. And again,
5 I can't say -- some of the little nuancy things
6 that are in there are very easily addressed in
7 amending the legislation as it's been drafted.

8 COUNCILWOMAN QUINONES-SANCHEZ: So,
9 disclosure in terms of your willingness to share
10 data or be rated?

11 MR. MCCLURE: Public disclosure. No,
12 benchmarking is not an issue for us.

13 COUNCILWOMAN QUINONES-SANCHEZ: It's the
14 disclosure.

15 MR. MCCLURE: That's correct.

16 MR. HAAS: And disclosure with the City is
17 not a problem either. Public disclosure is.

18 COUNCILWOMAN QUINONES-SANCHEZ: Okay. So,
19 you would be okay with the benchmarking provided
20 that the City got the information, but that you
21 don't want it posted publicly.

22 MR. MCCLURE: We don't want it on the
23 website.

24 COUNCILWOMAN QUINONES-SANCHEZ: Although,

1 you acknowledge that in your lease agreements
2 you do share that scoring with your tenants.

3 MR. HAAS: Upon request.

4 COUNCILWOMAN QUINONES-SANCHEZ: Oh, upon
5 request.

6 MR. HAAS: Everything in the real estate
7 business.

8 (Laughter)

9 COUNCILWOMAN QUINONES-SANCHEZ: Okay. So,
10 what would be number two for you of the items?

11 MR. HOFFMAN: Let me just look at it again.
12 Do you have the attachments?

13 MR. HAAS: Well, the tenant compliance was
14 probably -- you know, part of the confusion, I
15 guess, that we would have on this is, you know,
16 you are asked to -- if the tenant owns the
17 meter, you have to get the information from the
18 tenant because presently the utility will not
19 provide the meter information to the building
20 owner. They will only provide it to who pays
21 the utility bill, and that is a problem for us.

22 And then the technical language of the
23 Bill, we're to ask the tenant for that
24 information within, I think it's February 15 to

1 March 15 -- February 1 to March 15. And then if
2 we don't get the information, then we can still
3 fill out the Portfolio Manager without that
4 information, but then it kind of becomes really
5 useless.

6 We think the legislation should be -- the
7 oweness should be on the utility to
8 be legislatively required to supply that to the
9 owner so that we can fill out a meaningful
10 Portfolio Manager Report.

11 COUNCILWOMAN QUINONES-SANCHEZ: So, you
12 want an exemption for when you can't gather data
13 from your tenant?

14 MR. HAAS: No. We would like -- we would
15 prefer almost the flip of that. Have the
16 utility required to give us the information.

17 MR. MCCLURE: But if we can't get it, using
18 the Portfolio Manager Tool -- and the woman from
19 the EPA could probably address this more
20 specifically than we could. But the tool
21 doesn't work unless you have total building
22 data.

23 MR. HAAS: Correct. So, to carve out a
24 tenant, whether it's a minor tenant or a major

1 tenant, really renders the entire Portfolio
2 Manager Exercise useless.

3 COUNCILWOMAN QUINONES-SANCHEZ: So, we'll
4 have them come up to the table and address that
5 specifically. And then your other piece?
6 Because some of these things are technicalities
7 with your tenant relationship that some of it
8 could be fixed through your initial lease.

9 COUNCILWOMAN REYNOLDS-BROWN: Regulation
10 possibly.

11 COUNCILWOMAN QUINONES-SANCHEZ: Yeah.
12 Anything else?

13 MR. MCCLURE: Yeah, 3A. The way the Bill
14 was written --

15 COUNCILWOMAN QUINONES-SANCHEZ: The
16 amendments Councilwoman Blondell Reynolds has
17 put forth, does that your resolve your
18 commercial building classification concern?

19 MR. MCCLURE: We haven't seen the
20 amendments.

21 COUNCILWOMAN QUINONES-SANCHEZ: Okay. I
22 encourage you to do so before the hearing. I
23 don't want to take up anymore of your time, but
24 I would like the person from EPA to come in and

1 address the issue around the formula not
2 working.

3 COUNCILWOMAN REYNOLDS-BROWN: Please, Ms.
4 Leslie Cook and/or Alex Dews. You're welcome to
5 come back to the table.

6 And for anyone in attendance, there is
7 testimony, copies of the amendments and related
8 materials to my left over here for anyone's
9 review and use.

10 MR. MCCLURE: Thank you.

11 COUNCILWOMAN REYNOLDS-BROWN: You're
12 welcome.

13 MS. COOK: Thank you. So, it sounds like
14 you're looking for clarification on whole
15 building energy measurements.

16 COUNCILWOMAN QUINONES-SANCHEZ: According
17 to BOMA, part of the problem is that unless they
18 are able to fill all of the data, the matrix
19 gets skewed.

20 Is that the case?

21 MS. COOK: Well, Portfolio Manager is
22 intended to measure whole building energy
23 performance. There are ways to use the tool if
24 building owners are not able to collect whole

1 building energy data. They can track partial
2 building data. We encourage people to use whole
3 building data. That is what is calculated with
4 the 1 through 100 performance score.

5 We have seen -- to share our experience in
6 other jurisdictions where this kind of policy
7 has been put in place. In New York City, for
8 instance, Con Edison, the utility provider, once
9 that bill was introduced and passed, they
10 upgraded their customer service and did allow
11 building owners to access aggregate whole
12 building electricity information.

13 COUNCILWOMAN QUINONES-SANCHEZ: And they
14 did that voluntarily?

15 MS. COOK: Yes.

16 COUNCILWOMAN QUINONES-SANCHEZ: Okay.
17 Because we have PECO Energy coming next. We'll
18 ask them.

19 MS. COOK: Yes. They did that voluntarily.
20 There are a number of utilities around the
21 country that do work with Portfolio Manager in
22 various ways. This was one way that Con Ed
23 found a solution to provide building owners with
24 whole building electricity at the aggregate

1 level.

2 COUNCILWOMAN REYNOLDS-BROWN: Okay.

3 MS. COOK: I've also seen in other
4 jurisdictions.

5 For instance, Washington, DC, they have got
6 a similar policy to assist building owners to
7 request the data. They have put out template
8 request letters for tenant data that have
9 information included about the bill to help ease
10 that transaction.

11 COUNCILWOMAN REYNOLDS-BROWN: Do you know
12 if that was done by way of law or regulation?
13 Do you know? We will figure that out -- I guess
14 we can figure that out on our end.

15 MS. COOK: Con Edison voluntarily developed
16 that customer service for better access to
17 aggregate data. In Washington, DC, the District
18 simply provided that tenant template --

19 COUNCILWOMAN REYNOLDS-BROWN: I see.

20 MS. COOK: -- request letter as a resource
21 for building owners.

22 COUNCILWOMAN REYNOLDS-BROWN: Okay.

23 COUNCILWOMAN QUINONES-SANCHEZ: Thank you.

24 MS. COOK: Sure.

1 COUNCILWOMAN REYNOLDS-BROWN: Anything else
2 you'd like to add, Alex, please?

3 MR. DEWS: Yes, Councilwoman. One point of
4 clarification from the previous testimony from
5 BOMA. Just like to point out that as written
6 the legislation stipulates that the first year
7 for reporting to the City would be one year from
8 June 2012, so June 2013. But public disclosure,
9 the details of which would get worked out in the
10 regulations process.

11 As we have discussed, it would stipulate
12 that the first date of public disclosure would
13 not be until two years from now. So, there is
14 really a good bit of time for us to figure out
15 all of the kinks that may exist, you know, the
16 issues from the utility side as well as from the
17 commercial building owners' side. I think we
18 have had a lot of really productive
19 conversations all around on that already.

20 COUNCILWOMAN REYNOLDS-BROWN: Okay.

21 MR. DEWS: And I would assume that that
22 would continue. But I think there is a good
23 amount of time for building owners to understand
24 what their opportunities are and to work to

1 improve their Portfolio Manager scores.

2 COUNCILWOMAN REYNOLDS-BROWN: Okay then.

3 MR. DEWS: During that time period. Thank
4 you.

5 COUNCILWOMAN REYNOLDS-BROWN: Thank you for
6 that clarity on the time line. That is always
7 important.

8 Okay. Let the record show that written
9 testimony is being submitted on behalf of
10 Michael Murray and John J. McCullough. They are
11 not able to be with us. So let's now call up --
12 oh, forgive me. They were able to arrive?
13 Please come forward then, sir.

14 Welcome. If you would state your name for
15 the record and proceed with your testimony.

16 MR. MURRAY: Michael Murray.

17 COUNCILWOMAN REYNOLDS-BROWN: Okay.

18 MR. MURRAY: Good afternoon and thank you
19 for the privilege of testifying on this
20 important Bill. My name is Michael Murray. I'm
21 the Director of Operations for Nightingale
22 Realty.

23 Nightingale owns the 1700 Market Street
24 building in Downtown Philadelphia, over 1

1 million square feet of Class A office space.
2 Since 2005, I've been in charge of operations at
3 1700 Market Street. And from 2005 to 2010, I
4 was also Director of Operations for 1601 Market
5 Street. My responsibilities include oversight
6 of facility maintenance, annual operating
7 budgets, tenant and capital improvement
8 management.

9 Every year since 2008 the buildings have
10 achieved the ENERGY STAR designation from the
11 Environmental Protection Agency for their energy
12 efficiency. And I am responsible for
13 participation in the ENERGY STAR Program. Based
14 on my experience, benchmarking is relatively
15 easy to do and has benefitted our company.

16 To participate in ENERGY STAR, we have gone
17 through the same benchmarking processes as the
18 Energy Disclosure Bill requires. We found the
19 Portfolio Manager Benchmarking Program
20 relatively easy to use. Gathering and entering
21 the initial information on the building was the
22 hardest part. We had to gather the information
23 about the size and mix of tenant uses for our
24 buildings, and had to gather a year's worth of

1 utility bills. Then we entered the information
2 in the Portfolio Manager just like the Bill
3 requires. And then the program does most of the
4 calculations for you.

5 After you gather and enter the initial
6 information, the updates are relatively simple,
7 also. We just enter our energy use into the
8 program when we get our utility bills every
9 month. Although, it wasn't that difficult for
10 us, smaller building owners would require some
11 training and additional support for the initial
12 setup in the Portfolio Manager Program.

13 Our company has really benefitted from
14 benchmarking our buildings. For example, our
15 tenants pay for their energy use. So, we use
16 the benchmarking ENERGY STAR designation to
17 demonstrate to our tenants that we are managing
18 the buildings efficiently and that our capital
19 investments are being used to their benefit. It
20 makes our buildings more attractive to tenants.
21 Though, in some circumstances, tenants lack of
22 participation can impact overall scores.

23 Knowing our benchmarking score has also
24 spurred us to invest in energy-efficient capital

1 improvements for the building. Since 2008, we
2 have invested several million dollars to make
3 our building more energy efficient like HVAC,
4 electrical infrastructure, lighting upgrades,
5 also tenant outfits that meet and/or exceed
6 energy -- current energy code. Then we used a
7 benchmarking score to measure our performance
8 and to see the benefits of the capital
9 investments.

10 We've been able to improve the energy
11 efficiency of our buildings. And our energy
12 score has grown over the years. Nightingale
13 hopes that its leadership in energy efficiency
14 shows this Council and other building owners the
15 benefits of benchmarking required by the Energy
16 Disclosure Bill.

17 Thank you again for this opportunity to
18 testify. I welcome any questions that Council
19 Members may have.

20 COUNCILWOMAN REYNOLDS-BROWN: Council any?
21 We thank you for your testimony, sir. Thank you
22 very, very much.

23 MR. MURRAY: Thank you.

24 COUNCILWOMAN REYNOLDS-BROWN: You're

1 welcome.

2 If we could please call up members of the
3 nonprofit sector; Janet Milkman, Delaware Valley
4 Green Building Council; Andrew Sharp of Penn
5 Future, Next Great City; and Karen Stabenow,
6 Energy Coordinating Agency. This panel will be
7 followed by Elizabeth Murphy representing our
8 City's PECO.

9 Please state your name for the record and
10 proceed with your testimony.

11 MR. SHARP: My name is Andrew Sharp from
12 Next Great City Coalition. I'm the Philadelphia
13 Outreach Coordinator for Penn Future.

14 Good afternoon, Council Members. As I
15 said, my name is Andrew Sharp. I am the
16 Philadelphia Outreach Coordinator for Penn
17 Future, a statewide environmental advocacy
18 organization. Penn Future is the lead
19 organization behind the Next Great City
20 Initiative, which is dedicated to creating a
21 positive future for Philadelphia by advocating
22 for common sense, cost-effective policies that
23 both enhance environmental quality and
24 strengthen neighborhoods.

1 Next Great City is backed by over 140
2 groups in Philadelphia from labor groups to
3 civic associations to faith groups all working
4 together to create a cleaner, safer healthier
5 city. I am here today to express the Next Great
6 City Coalition strong support for Bill 120428,
7 the Energy Benchmarking Bill before this
8 committee. I'd also like to recognize
9 Councilwoman Brown -- Reynolds-Brown for your
10 leadership in bringing this innovative
11 legislation forth.

12 One of the issues that Next Great City
13 members care most about is achieving a higher
14 degree of energy efficiency in this city,
15 particularly in our building stock. In a study
16 that the Next Great City Coalition commissioned
17 in 2010 with Terry Madonna, 86 percent of
18 Philadelphians favored policies that would
19 increase energy efficiency in our residential
20 and commercial buildings.

21 Next Great City in coordination with the
22 Delaware Valley Green Building Council, the
23 energy coordinating agency and with technical
24 help from the Energy Efficient Buildings Hub,

1 convened the Coalition for an Energy Efficient
2 Philadelphia, otherwise known as C-E-E-P or
3 CEEP. The Coalition for an Energy Efficient
4 Philadelphia is a broad coalition of businesses,
5 institutions, public utilities, citizens and
6 organizations working together to achieve better
7 energy efficiency in our buildings. Our members
8 range from law firms like Cozen and O'Connor to
9 groups like the Building Industry Association of
10 Philadelphia to organizations like the Natural
11 Resources Defense Council and Penn Future.

12 As a first goal, we set out to encourage
13 energy benchmarking in commercial buildings.
14 For several months, members of our coalition
15 have participated in forums and hosted events
16 throughout the city, engaging the public at
17 large and bringing together stakeholders to
18 discuss energy benchmarking.

19 As you have heard in prior testimony and it
20 bears repeating, Philadelphia's commercial
21 building stock is on average 30 years old and
22 incredibly inefficient and outdated. Currently,
23 building owners and tenants are paying more for
24 their utilities than they need to because of

1 wasted energy. The good news is that our
2 buildings are really ripe for improvement and
3 cost savings. Substantial savings can be
4 achieved through simple, no cost measures to
5 curtail energy usage. But in order to realize
6 these cost savings, we need to know where we
7 stand. We need measurable data. And that is
8 why this bill is so important.

9 As energy prices continue to rise, energy
10 efficiency is becoming increasingly important to
11 our City's economic well being. Benchmarking is
12 critical to overcoming the information gap so
13 Philadelphians can make smarter, more cost
14 effective choices. Penn Future and the Next
15 Great City Coalition urge you to move the Bill
16 out of Committee for consideration by the
17 Council of the Whole.

18 Thank you. And I would be happy to answer
19 any questions.

20 COUNCILWOMAN REYNOLDS-BROWN: You're very
21 welcome. We thank you for your testimony and
22 for the important consistent work of Next Great
23 City.

24 Please state your name for the record and

1 proceed with your testimony.

2 MS. STABENOW: My name is Karen Stabenow.
3 Good afternoon and thank you for the opportunity
4 to testify on this important bill.

5 My name is Karen Stabenow from the Energy
6 Coordinating Agency, ECA. And I am here today
7 to testify in strong support of Bill No. 120428.
8 I've worked in the building energy efficiency
9 industry for more than 15 years, and can testify
10 to the advantages that buildings and
11 neighborhoods gain from energy efficiency first
12 hand.

13 ECA administers large scale residential
14 energy efficiency programs, both low income
15 energy and water conservation programs and
16 regional home performance programs. ECA
17 operates 15 neighborhood energy centers across
18 Philadelphia that serve as one stop shops for
19 all low income energy services and also operates
20 the Knight Green Jobs Training Center, which has
21 trained over 1,500 men and women to state and
22 national energy efficiency standards.

23 Commercial buildings including condominiums
24 and co-ops in Philadelphia contribute 40 percent

1 of the City's greenhouse gas emissions and
2 represent approximately one-half of the total
3 energy consumption of all buildings in the City.
4 Currently, commercial buildings, condominiums
5 and co-ops waste 40 to 75 percent of the energy
6 they consume. And whether compared to
7 electricity or natural gas, energy-efficiency
8 improvements in buildings typically cost less
9 than half as much as the energy they save.
10 Clearly, this is a sector that needs to be
11 addressed in terms of energy efficiency.

12 Benchmarking buildings is the first step in
13 that direction as it gives building owners and
14 tenants the basic information they need to
15 improve the energy efficiency of their
16 buildings. By tracking a building's water and
17 energy consumption with the EPA's Portfolio
18 Manager, building owners can set investment
19 priorities, identify underperforming buildings,
20 verify efficiency improvements, receive EPA
21 recognition if eligible and most importantly
22 save money. Tracking this information enables
23 building owners to compare the building's energy
24 intensity to similarly sized commercial

1 buildings already benchmarked across the
2 country.

3 When a building is managed more
4 efficiently, it operates at a lower cost.
5 Tenants are generally more comfortable, more
6 productive and have fewer complaints.
7 Philadelphia's existing commercial buildings are
8 on average, as said, more than 30 years old.
9 This means that most of these buildings in
10 Philadelphia have outdated, inefficient and
11 oversized mechanical systems. By developing a
12 comprehensive plan to update a building's
13 envelope, building owners will find that their
14 buildings will require smaller HVAC equipment
15 for heating and cooling, improved lighting while
16 lowering the actual cost of lighting and reduce
17 water consumption.

18 Benchmarking also provides the opportunity
19 to establish partnerships with city agencies
20 such as the Philadelphia Water Department to
21 reduce storm water runoff and to establish
22 passive strategies to reduce the heat island
23 effect and building cooling loads. Another huge
24 benefit that this Bill will have in Philadelphia

1 is job creation.

2 Energy efficiency is the cleanest, cheapest
3 and safest form of energy and it also creates
4 the most jobs. Most importantly these jobs are
5 local. This Bill will create jobs for energy
6 auditors, installers, inspectors, analysts and
7 many others helping to strengthen our local
8 economic. This has been the experience in every
9 city that has adopted benchmarking including
10 Seattle, Austin and New York City.

11 Just as the buildings will become more
12 resilient and able to weather a future of higher
13 energy prices, so the City's economy will also
14 become stronger with more residents employed in
15 a clean energy sector. We anticipate that this
16 Bill will also strengthen tenant/landlord
17 relationships. Both building owners and tenants
18 will be encouraged to work together. This is an
19 activity that will build a sense of common
20 purpose within the building community in
21 Philadelphia to achieve greater energy
22 efficiency. It will spark a conversation
23 between tenants and landlords about energy
24 efficiency and help all participants to develop

1 energy-efficiency improvements. The cheapest
2 and most available new energy is the energy we
3 waste. In ECA's judgment, this is a critical
4 component of this Bill and a vital reason why
5 City Council should pass the Bill.

6 We commend Councilwoman Reynolds-Brown for
7 her leadership. And urge Council to include
8 condominiums and co-ops in this Bill and to pass
9 this Bill without delay so that we can start
10 saving energy and money in our buildings.

11 Thank you again for the opportunity to
12 testify. And I welcome any questions.

13 COUNCILWOMAN REYNOLDS-BROWN: We thank you
14 for your testimony, Energy Coordinating Agency.
15 Any questions or comments, Council Lady? Okay
16 then.

17 If we can please proceed with the Delaware
18 Valley Green Building Council who along with
19 BOMA and others have been at the table from
20 square one with us. Thank you very much.

21 MS. MILKMAN: My name is Janet Milkman.
22 I'm the Executive Director of the Delaware
23 Valley Green Building Council. We are the local
24 chapter of the US Green Building Council. We

1 have about 800 members in our region from the
2 Green Building Industry. They are from
3 construction, real estate, architecture,
4 engineering, building systems, building owners
5 and operators, lenders, accounting and law firms
6 including 400 that live and work in
7 Philadelphia.

8 I am here today to offer our support for
9 the Energy Benchmarking Bill No. 120428. And we
10 thank Councilwoman Blondell Reynolds-Brown for
11 her leadership in introducing this Bill. I am
12 just going to make two points because I think
13 that the folks who are coming behind us have
14 some important things to say. And my written
15 testimony gives a lot of data that you have
16 heard already.

17 The first point I want to say is that the
18 important thing about this Bill is that it
19 includes both benchmarking and disclosure. Some
20 may prefer incentives over mandates, but we
21 already have incentives. We already have a
22 recognition program for building owners that
23 benchmark their buildings. And it's called
24 ENERGY STAR labeling. You can already get

1 recognized for having an energy efficient
2 building. You can already get recognized for
3 having a LEED building. You don't need more
4 incentives, but what we do need is more
5 information for both building owners and
6 consumers. We need to bring along the
7 followers. We are already recognizing the
8 leaders.

9 Again, as Karen said, this is an
10 opportunity in your legislation. There is an
11 opportunity for building owners and tenants to
12 work together to learn about ways. And there
13 are many easy, simple and cost-effective ways to
14 save energy in their buildings, to make them
15 more comfortable, to make -- to save them money.

16 Some of our members have talked about
17 concerns that are related to the implementation
18 side of this. They do not have concerns related
19 to the legislative side. If this Bill passes,
20 and we hope it does, DVGBC stands ready to
21 support Council and the City Administration and
22 other partners to ensure effective and efficient
23 program implementation. We have thought a lot
24 about how to address some of the issues that

1 have come up in other cities. And we have
2 learned from that experience. We believe we can
3 find effective solutions. We think this Bill
4 means -- will level the playing field and
5 provide data access to both consumers and
6 building owners alike. It's fair. It's doable.
7 It's important.

8 And we thank you for your leadership and
9 encourage you to pass it.

10 COUNCILWOMAN REYNOLDS-BROWN: We thank you
11 all for your testimony. And the philosophy we
12 operate in out of my office is that there is no
13 pride in authorship. It's about getting to a
14 better bill. So, we are open to the ideas,
15 recommendation or suggestions you might have
16 around implementation. Okay. Thank you very
17 much.

18 If we can please invite up now Elizabeth
19 Murphy from PECO. And our final panel will
20 include but not be limited to Andrew Burr,
21 Institute for Market Transformation. If you can
22 prepare to move after this next witness; Laurie
23 Actman from Hub and Paul Spiegel, the Practical
24 Energy Solutions. This is Ms. Murphy from PECO.

1 Welcome.

2 MS. MURPHY: Good afternoon. Good
3 afternoon. Thank you very much.

4 I am Liz Murphy with PECO. Philadelphia's
5 electric distribution company. And I am joined
6 today by Tom Bonner, also with PECO, who has
7 been working with the staff and some of the
8 stakeholders on the legislation. So, I've just
9 ask Tom to sit --

10 COUNCILWOMAN REYNOLDS-BROWN: Surely.

11 MS. MURPHY: -- in case there are some
12 specific questions that I can't answer.

13 I think that you all know that PECO has
14 been a leader in promoting energy efficiency.
15 In fact, sitting in this room today about three
16 years ago we worked with the City to improve the
17 lighting, saving approximately 75 percent of the
18 energy based on the new lighting. So, this in
19 addition to our Smart Ideas Programs in which we
20 have throughout the City, we've been able to
21 save our customers \$153 million in electricity
22 charges. We've paid customers over \$67 million
23 in rebates. And we really with our energy
24 efficiency programs have been able to -- they

1 resulted in the equivalent of planting 1.1
2 million trees and getting 96,000 cars off the
3 highway annually.

4 We were also just this past winter honored
5 by EPA for the ENERGY STAR of the Year Award for
6 our Smart Ideas Program. So, we commend both
7 you Councilwoman and the Committee for looking
8 at this issue. Even Exelon, our parent company,
9 has been working on energy efficiency as a
10 cornerstone for the Exelon 2020 program.

11 We agree with you and many of the other
12 speakers today that building energy efficiency
13 programs represent one of our best opportunities
14 to achieve cost-effective reductions in
15 emissions and efficiency improvements. With
16 regard to the proposed legislation, PECO wants
17 to emphasize -- and the speaker from EPA
18 discussed this -- Portfolio Manager is available
19 right now. Folks that have access to their PECO
20 bills, either paper or electronically, have the
21 ability to process the information through
22 Portfolio Manager.

23 We understand also our customers' interest
24 in receiving automated downloads that are

1 formatted specifically for Portfolio Manager,
2 but we have concerns in two areas that we
3 believe merit some additional attention that I'd
4 like to speak about.

5 First, we do not believe that the legal
6 landscape regarding customer privacy and the
7 release of billing information into government
8 sponsored, benchmarking tools is an entirely
9 settled manner. And we heard a little bit of
10 that this afternoon from the representatives
11 from BOMA. Because this could raise some legal
12 liability issues for PECO and privacy concerns
13 for our customers, we suggest that discussions
14 be held amongst stakeholders to develop
15 resolutions to this issue before the legislation
16 is finalized.

17 Secondly, we have engaged with local
18 stakeholders, including the City of
19 Philadelphia, about the potential for PECO to
20 provide automated download of customer data
21 directly from our system into the Portfolio
22 Manager. These are complex issues related to
23 development of IT platforms. And the timing and
24 the release of the information should be

1 coordinated with any kind of new version of
2 Portfolio Manager. So, we just want to make
3 sure that any new platforms for Portfolio
4 Manager or any new automated systems that are
5 being developed by PECO are coordinated.

6 In addition, PECO believes that there are
7 four core principles related to these issues
8 that should be considered as part of the
9 legislation.

10 First, PECO must only be asked to provide
11 data in one standardized format that is
12 compatible with Portfolio Manager. And I talked
13 a little bit about that. We want to make sure
14 that the timing is consistent.

15 We also believe that the implementation
16 should be timed so that PECO does not develop a
17 system that quickly becomes obsolete upon
18 updates to the Portfolio Manager.

19 Third, any of the provisions of the
20 automated transfer should be -- not be an
21 unfunded mandate to PECO. We want to make sure
22 that we have got cost recovery under approval
23 from the Public Utility Commission or that it's
24 a fee based service.

1 And finally, customers, not PECO, should be
2 responsible for preparing and maintaining the
3 list for automated transfer using templates
4 provided by PECO. So again, I think consistent
5 with the automation side which is very complex,
6 we just want to make sure that we are
7 coordinated.

8 We again, thank Council for the opportunity
9 to testify. We thank you for your leadership
10 and thoughtfulness to this issue. And we are
11 willing and ready to assist with any further
12 amendments. Thank you.

13 COUNCILWOMAN REYNOLDS-BROWN: Okay then.
14 Council Lady, any questions?

15 COUNCILWOMAN BLACKWELL: We wanted to say
16 thank you and let you know that Ed McBride is
17 just the best thing PECO could have.

18 MS. MURPHY: I know.

19 COUNCILWOMAN BLACKWELL: He's our guy.

20 MS. MURPHY: And I know he didn't tell you
21 to say that this afternoon.

22 COUNCILWOMAN BLACKWELL: Absolutely not.

23 MS. MURPHY: Thank you very much for the
24 compliment.

1 COUNCILWOMAN REYNOLDS-BROWN: We appreciate
2 his presence every week. And know that we are
3 going to certainly do the follow up on your
4 offer to sit with BOMA, the Mayor's Office of
5 Sustainability and the Bill Green Council and
6 anyone else around this issue of disclosure.
7 That appears to be the unfinished wrinkle. And
8 we need to figure that out as we move forward.

9 So thank you for the offer.

10 MS. MURPHY: Thank you very much.

11 COUNCILWOMAN REYNOLDS-BROWN: If we could
12 please invite Andrew Burr, Institute for Market
13 Transformation; Laurie Actman of Hub; and Paul
14 Spiegel, Practical Energy Solutions.

15 Anyone else care to testify on this Bill
16 please alert us as we move towards the end of
17 this Public Hearing.

18 Good morning. Please state -- good
19 afternoon it is. State your name for the record
20 and proceed with your testimony.

21 MR. BURR: Andrew Burr, Institute for
22 Market Transformation. Chair Reynolds-Brown,
23 Members of the Committee, good afternoon and
24 thank you for the opportunity to testify. I

1 will make this brief.

2 The Institute for Market Transformation is
3 a national nonprofit organization promoting
4 energy efficiency in buildings. As you know, a
5 growing number of cities are implementing
6 benchmarking and disclosure programs. IMT is
7 acting as an adviser to many of these cities
8 including New York City, Mayor's Office of Long
9 Term Planning and Sustainability; Boston Energy;
10 the Municipal utility implementing the Austin
11 Ordinance; Seattle Office of Sustainability and
12 Energy; San Francisco Department of Environment;
13 and District of Columbia Department of
14 Environment. I would be happy to answer any
15 questions you have about these existing
16 programs.

17 Philadelphia will benefit tremendously from
18 the implementation frameworks and best practices
19 that are being piloted by these cities. And I
20 also believe that this bill leaves sufficient
21 flexible to tailor this program to this City's
22 needs and the needs of Philadelphia
23 stakeholders. Just a few words on benchmarking
24 disclosure.

1 The reason that all of these cities have
2 adopted these program are the same. It is to
3 increase and sustain demand for energy
4 efficiency improvements in existing buildings
5 which will save energy, reduce greenhouse gas
6 emissions, reduce consumer energy cost
7 especially to businesses and create jobs. You
8 are not going to do that solely through
9 financial incentives, which has been the vehicle
10 of choice for so long for existing buildings.
11 The demand dries up as soon as the money dries
12 up. So, you do that two ways. And this is what
13 the cities have found.

14 One, institutionalize energy assessment,
15 i.e., benchmarking. Because if building owners
16 don't know how their building is performing,
17 they probably aren't going to try to improve.

18 And the second is to make information
19 transparent same way that fuel efficiency is
20 transparent for vehicles, nutritional
21 information is transparent for food. These
22 cities are not looking at public disclosure as a
23 Scarlet Letter or a name in shame. They are
24 looking at it as one more data point in 50 or a

1 100 data points that a real estate consumer
2 looks at prior to a transaction. And to keep
3 things in perspective, put against rent and
4 location and other tenants and so forth. We do
5 not feel like that disclosure of a performance
6 metric is going to throw any building into
7 financial distress.

8 This Bill does both of those things
9 institutionalizes benchmarking and provides for
10 disclosure. And that's why IMT supports this
11 Bill.

12 Thank you very much.

13 COUNCILWOMAN REYNOLDS-BROWN: I thank you
14 very, very much. I must say parenthetically
15 that I am having a deja vu as we sat three or
16 four years ago around menu labeling and concerns
17 raised around my Menu Labeling Bill. Fast
18 forward X number of years later, and it's been
19 embraced in ways that we didn't realize.

20 So, there is a lot to be said for making
21 information transparent. It really isn't how we
22 do it. So, I thank you very much for your
23 testimony.

24 Please, sir, state your name for the

1 record.

2 MR. SPIEGEL: My name is Paul Spiegel. I
3 am President of Practical Energy Solutions. And
4 I want to thank you for giving me the chance to
5 testify today. I've got a background in both
6 engineering and economics. I teach in the
7 Department of Civil and Environmental
8 Engineering part time at Temple University. I
9 also have a degree in economics. And I found
10 that I actually have been highly trained to bore
11 people in more ways than just about anybody else
12 you know. But I do want to get right to the
13 point here and try not to be repetitive in what
14 other people talked about.

15 People at my company and our clients have
16 seen how important information is in managing
17 buildings and understanding energy use. Having
18 some kind of knowledge and information to help
19 you manage your building is really the critical
20 first step in understanding what's going on and
21 whether you even have an energy problem or
22 opportunities to reduce your energy consumption.

23 I can liken it to something like a
24 cholesterol test. And you can get a cholesterol

1 test that tells you your cholesterol level is
2 210, but it doesn't really mean anything unless
3 you are benchmarking it against some standard.
4 So, it's important to understand that, you know,
5 at some point 210 was actually pretty good but I
6 think now it qualifies me to be on Lipitor or
7 something like that. But you need something
8 besides a raw number.

9 So if I told someone you are paying \$6 per
10 square foot for energy in your building space or
11 you have an EUI of 185 kila BTUs or KBTUs, it
12 really doesn't mean anything to people unless
13 it's put into some kind of context and
14 comparison with other buildings. So again, the
15 benchmarking component of this Bill is critical
16 to understand where you stand.

17 Through the ENERGY STAR Portfolio Manager,
18 a building is scored on a rating of 1 to 100.
19 Obviously, with 100 being the high score and a
20 positive thing. Anything over a 75 is actually
21 considered an A score. You get an award, an
22 ENERGY STAR label for your building. It's a
23 very, very positive thing.

24 What we found for our clients that get a

1 score of 11 on their building, it's not a
2 Scarlet Letter for them. Just means they have
3 significant opportunity that goes well beyond
4 just the tenant impact on energy use. There
5 is -- if you have a score of 11, it means there
6 are issues with your building envelope, your
7 management system, your HVAC systems, your
8 lighting. So, it means you have all of these
9 opportunities to get better.

10 Now typically, when a law is up for
11 adoption, the people who aren't going to look
12 good or gonna be made to -- in this disclosure
13 portion, people with lower scores are likely
14 going to be not in favor of this Bill. It's
15 something that my wife once said that if they
16 passed a law or considered a law for people that
17 talked too much, that I would be against it.
18 But she and my kids would actually support it
19 wholeheartedly.

20 So again --

21 COUNCILWOMAN REYNOLDS-BROWN: Do you agree?

22 MR. SPIEGEL: -- it's all about
23 opportunity.

24 COUNCILWOMAN REYNOLDS-BROWN: Do you agree?

1 MR. SPIEGEL: Huh?

2 COUNCILWOMAN REYNOLDS-BROWN: Do you agree?

3 MR. SPIEGEL: Do I agree that I talk to
4 much? I agree that. Yes.

5 COUNCILWOMAN REYNOLDS-BROWN: That your
6 children would agree with that?

7 MR. SPIEGEL: Yes. Absolutely. They would
8 be in favor of such a law, I would say.

9 But there is also this idea that disclosure
10 bill would penalize old buildings and maybe put
11 newer buildings in a better light. But we found
12 that there really is no direct relationship
13 between the age of a building and the ENERGY
14 STAR score. There are so many things that go
15 into it. Some older buildings have done certain
16 retrofits. Some older buildings are managed
17 better than some of the newer buildings.

18 So, we have seen three, four-year-old
19 buildings with ENERGY STAR scores of 20, even
20 LEED certified buildings in the past where some
21 new buildings -- some of the older buildings are
22 achieving this ENERGY STAR label. So, it's
23 really important to kind of bring that
24 competitive feeling among all of the real estate

1 owners to disclose this information to make sure
2 it's publicly available, to make sure the people
3 shopping for office space have proper
4 information on which to make their decision.

5 And I will end with a little thing from
6 economics that often people say let market
7 forces work and you don't need legislation. The
8 market will work everything out. But that
9 always assumes that there is perfect information
10 available on which people make decisions. And
11 in this case, that information is not available.
12 And this law helps people get information, helps
13 them make decisions about managing their
14 buildings or even where to locate.

15 And I support this Bill. And I think it's
16 a great thing for the City.

17 COUNCILWOMAN REYNOLDS-BROWN: I thank you
18 very much for your testimony. And for me, it's
19 always exciting to have members from academia to
20 come and speak on an issue. Appreciate your
21 testimony.

22 As we move to our last witness, I would
23 like to send a message to Members of this
24 Committee to join us as we will soon conclude

1 the Public Hearing and move to a Public Meeting.
2 And let me also seize the moment to salute
3 Councilmember James Kenney who's principally
4 responsible for even the creation of a Committee
5 on the Environment and Sustainability, I think
6 now, four or five years ago recognizing fully
7 that the environment -- it is the future, and we
8 as a City need to be smart about how we help to
9 make our city a more greener one.

10 With that, we will move to our last
11 witness. Laurie Actman of Hub. Can you tell us
12 what the acronym stands for.

13 MS. ACTMAN: Yes. It's Laurie Actman with
14 the Energy Efficient Building Hub.

15 COUNCILWOMAN REYNOLDS-BROWN: Very well.
16 Proceed with your testimony.

17 MS. ACTMAN: Okay. I will also try to be
18 brief, since I'm the last person formally to
19 speak.

20 Chairman Reynolds-Brown and Members of the
21 Committee, thank you for the opportunity to
22 testify today. I am, again, Laurie Actman, the
23 Deputy Director of the Energy Efficient
24 Buildings Hub.

1 The Hub was established as an energy
2 regional innovation cluster at the Navy Yard in
3 February 2011. We won a national competition
4 and have \$130 million from the Department of
5 Energy and other federal agencies as well as the
6 Commonwealth of Pennsylvania. As a multiagency
7 sponsored E-RIC, the Hub is unique dual mission
8 of improving energy efficiency in buildings and
9 promoting regional economic growth and job
10 creation. Our goal is to reduce commercial and
11 multifamily building energy use by 20 percent by
12 2020 in Greater Philadelphia. We believe this
13 legislation could help us achieve that goal.

14 Both City Council and the Mayor have
15 undertaken significant initiatives that are
16 contributing to Philadelphia's position as a
17 sustainability leader and have enabled us to
18 effectively compete for national investment that
19 supports energy innovation. Our Hub is the
20 latest success story of all of this partnership
21 and effort.

22 Since 2009, Philadelphia and the region
23 have attracted over 350 million federal dollars
24 to invest in our city and region's electricity

1 infrastructure and energy savings goals.
2 Greenworks is a great example with its
3 articulated goals of 30 percent reduction in
4 City government buildings and 10 percent
5 reduction in the City as a whole. Two weeks
6 ago, we testified about the new Philadelphia
7 Energy Authority and how it can contribute to
8 the City's and the Hub's energy efficiency
9 sustainability goals.

10 So, we really believe this legislation will
11 further position the City as a national and
12 international leader and that's important
13 because there is all this investment available
14 that we can compete for if we have the right
15 leadership and the right legislation in place.
16 So, I just wanted to highlight a few key things
17 from my written testimony. And the first one is
18 some characteristics of our real estate market.

19 Last fall we commissioned a study to really
20 kind of assess the opportunity for retrofit in
21 the region. We looked at buildings between
22 20,000 and 100,000 square feet. And we found
23 that nearly half of these buildings are kind of
24 good candidates for retrofit and they are ready

1 to go. We also found that if we undertook all
2 this activity, we can generate \$618 million in
3 local spending and support over 23,000 jobs.
4 For buildings of all sizes, we found that nearly
5 80 percent of properties in the region are
6 retrofit redid. This is over 7,000 properties
7 with the square footage of over 300 million
8 square feet. We also found that Philadelphia's
9 energy expenditures are 29 percent above the
10 national average and the fourth highest among
11 major cities.

12 Finally, we found that the top 25 property
13 owners in the region own barely 10 percent of
14 all commercial buildings revealing how diffuse
15 the ownership of mid size commercial properties
16 is in the Philadelphia area. Even our two
17 largest real estate owners Brandywine Realty
18 Trust and Liberty Property Trust account for
19 only 3 percent of all commercial space.

20 So, what all this information really tells
21 us is that our market and the city and the
22 region has huge potential in terms of energy
23 efficiency and retrofit activity, but we need
24 new tools to spur education and interest and

1 energy efficient commercial space among owners
2 and tenants especially because the majority of
3 our commercial stock is not owned by these
4 larger, well resourced companies who may be
5 already benchmarking their buildings and have
6 the time and ability to do that. So we really
7 think that this is another tool that would
8 enable more owners to leverage existing programs
9 and incentives and get educated about what their
10 buildings do to spur interest.

11 So, I don't want to repeat what has already
12 been said about the value of benchmarking. But
13 I think there were three key messages that other
14 folks have said that I want to echo. One is you
15 can't manage what you don't measure. So again,
16 this is getting more building owners interested
17 in what their building does by just basic
18 understanding of how it uses energy.

19 I think this is not about shame. It's
20 about transparency. There is a few things that
21 make this maybe a higher hurdle that I think we
22 can work on. But this is really about
23 accelerating demand. And again, as Janet
24 Milkman said, this is really not about the

1 leaders but about the followers and how can we
2 get more building owners interested in what
3 their buildings do and make improvements so that
4 they will save energy.

5 So again, we think this legislation will
6 help accelerate the market for retrofit in the
7 region, generate interest and demand and kind of
8 move the whole effort forward.

9 There is a few implementation issues that
10 have kind of been alluded to here. I know that
11 the partners around the table and the folks
12 involved in this effort will be able to address
13 these issues. And we're certainly committed to
14 working with everyone to address them, as well.

15 One is around sub metering and the way that
16 most leases for commercial space work is that
17 the tenant carries the cost of occupancy
18 including the utility bills. This can make it
19 hard for an owner to disclose energy use if they
20 don't have access to utility expenditures.
21 However, as was mentioned before, there are
22 utilities implementing strategies to make it
23 easier for building owners to access their data.
24 I think it's very encouraging that PECO is

1 exploring this. We are already working with
2 PECO and our utility commissioners to kind of
3 recommend strategies around whole building data
4 access. We are also working directly with New
5 York City to help them analyze and manage their
6 benchmarking data. We think there are some key
7 lessons learned from that work that we can apply
8 to Philadelphia as this effort moves forward.

9 One of the other challenges is the split
10 incentives around leases. And we are also
11 working with a number of partners here to come
12 up with new products such as green leases and
13 other strategies to address the split incentives
14 between owners and tenants. And we think this
15 will be another way to address some of the
16 challenges in the market and move forward and
17 accelerate the ability to retrofit buildings and
18 really comply with the legislation.

19 So in conclusion, we are committed to
20 helping provide implementation support to the
21 City, PECO, utilities, building owners and
22 tenants so that this proposed legislation
23 achieves the desired energy savings and economic
24 outcomes that everyone intends.

1 Thank you for allowing us to testify.

2 COUNCILWOMAN REYNOLDS-BROWN: You're
3 absolutely welcome. Again, we thank all of you
4 who have offered testimony and also heightened
5 our awareness of a few, I will call them,
6 wrinkles. That I'm optimistic that we can work
7 through.

8 At this hour we do have a quorum. And let
9 me restate that there are amendments to this
10 Bill, and everyone is welcome to copies of those
11 amendments on the side which will move us a step
12 closer to having a better bill knowing full well
13 this is not the end of the road.

14 This will conclude the Public Hearing of
15 the Committee on the Environment. And we will
16 now go into a Public Meeting; whereby, I will be
17 appointing Majority Leader Councilman Jones to
18 be a part of this quorum. And I should also
19 mention that the Founder of the Committee on the
20 Environment is with us, Councilman James Kenney.

21 So, with that -- let me also acknowledge
22 Councilwoman Marion Tasco who has been with us
23 and listening trying to split herself in half in
24 her office at another meeting and with this

1 Committee, as well.

2 So with that, the Chair recognizes Majority
3 Leader Councilman Jones for a motion to amend
4 Bill No. 120428.

5 COUNCILMAN JONES: Thank you, Madam Chair.
6 On behalf of you, Ms. Brown, I offer an
7 Amendment to Bill No. 120428 and move that we
8 adopt the amendments.

9 COUNCILWOMAN REYNOLDS-BROWN: Yes. We want
10 the record to reflect that there are five
11 amendments, all of which are stated technical
12 amendments that are available for your review on
13 this Bill 120428.

14 Bill No. 120428 has been moved -- can I
15 hear a second, please.

16 COUNCILWOMAN TASCO: Second.

17 COUNCILWOMAN REYNOLDS-BROWN: Has been
18 moved and properly seconded that the Bill will
19 be amended.

20 All those in favor, say aye.

21 (Ayes.)

22 All those opposed? The ayes have it and
23 the motion carries.

24 The Chair now recognizes Majority Leader

1 Councilman Jones for a motion on Bill No. 120428
2 as amended.

3 COUNCILMAN JONES: I move that Bill No.
4 120428 be reported out of Committee as amended
5 with a favorable recommendation that the Rules
6 of Council be suspended as to permit first
7 reading at our next session of Council.

8 COUNCILWOMAN REYNOLDS-BROWN: All in
9 favor -- do I hear a second?

10 COUNCILWOMAN BLACKWELL: Second.

11 COUNCILWOMAN REYNOLDS-BROWN: All in favor
12 say aye.

13 (Ayes)

14 Bill No. 120428 has been moved and properly
15 seconded as amended. Will be reported out of
16 Committee with a favorable recommendation and
17 moved that the Rules of Council be suspended as
18 to permit first reading at our next scheduled
19 session.

20 All those in favor, signify by saying aye.

21 (Ayes)

22 All opposed? Seeing none then, this Bill
23 has been approved out of Committee with a
24 favorable recommendation. We want to thank you

1 all again. There is subsequent homework to be
2 done on all sides. And this will conclude this
3 meeting. Thank you very, very much.

4 (Committee Meeting concluded at 3:30 p.m.)

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

C E R T I F I C A T I O N

I, hereby certify that the proceedings and evidence noted are contained fully and accurately in the stenographic notes taken by me in the foregoing matter, and that this is a correct transcript of the same.

ANGELA M. KING, RPR, Notary Public

(The foregoing certification of this transcript does not apply to any reproduction of the same by any means, unless under the direct control and/or supervision of the certifying reporter.)

www.strehlowcourtreporting.com

A				
ability 62:21 79:6 81:17	44:2 addition 61:19 64:6	50:23 53:6 57:14	Andrew 4:7 49:4 49:11,15 60:20 66:12,21	arrive 45:12 articulated 35:8 77:3
able 41:18,24 45:11,12 48:10 56:12 61:20,24 80:12	additional 35:14 47:11 63:3	Agency's 13:19 agenda 30:13	and/or 25:24 26:24 41:4 48:5 86:20	asked 38:16 64:10 assess 16:14,21 77:20
absolutely 65:22 73:7 82:3	address 11:8 30:2 36:15 39:19 40:4 41:1 59:24 80:12,14 81:13 81:15	aggregate 28:14 42:11,24 43:17	ANGELA 86:13	assessment 68:14
academia 74:19	aged 11:10 ago 4:19 61:16 69:16 75:6 77:6	aging 11:10	annual 12:14 14:22 18:17 46:6	assets 23:11
accelerate 80:6 81:17	addressed 5:21 29:18 35:5 37:6 54:11	agree 32:2 62:11 72:21,24 73:2,3 73:4,6	annually 62:3	assist 16:10,13 43:6 65:11
accelerating 79:23	addressing 14:12 15:8 23:6	agreements 38:1	answer 31:4 52:18 61:12 67:14	Association 21:11 51:9
access 42:11 43:16 60:5 62:19 80:20,23 81:4	administers 53:13	ahead 23:15	anticipate 56:15	associations 50:3
accessible 11:14	Administration 7:8 19:7 59:21	aide 22:19	anybody 70:11	assume 44:21
accomplishment 15:1	Administration's 28:17	aims 3:19	anymore 40:23	assumes 74:9
account 78:18	adopt 83:8	alert 66:16	anyone's 41:8	attachments 38:12
accounting 58:5	adopted 26:21 56:9 68:2	Alex 7:10,18,22 41:4 44:2	anyway 32:8	attendance 2:3 6:20 41:6
accurately 11:24 86:7	adopting 17:24	alike 25:17 29:10 60:6	appealing 7:3	attention 63:3
achieve 32:15 51:6 56:21 62:14 76:13	adoption 72:11	allow 18:4 42:10	appear 36:21	attracted 76:23
achieved 46:10 52:4	advance 9:4	allowance 33:6	appearance 14:1 appears 35:10 66:7	attracting 24:7
achieves 81:23	advantage 24:14	allowed 4:14	apples 12:5,5 30:16	attractive 47:20
achieving 50:13 73:22	advantages 53:10	allowing 82:1	apples-to-apples 30:24	auditors 56:6
acknowledge 3:24 4:12 29:3 38:1 82:21	adversely 23:2	allows 16:20	apply 27:5 81:7 86:18	Austin 4:22 56:10 67:10
acronym 75:12	adviser 67:7	alluded 80:10	appointing 82:17	authority 6:15 77:7
act 16:5,7	advocacy 49:17	ambitious 30:12	appreciate 19:1,6 66:1 74:20	authorship 60:13
acting 67:7	advocates 4:2	amend 83:3	approach 13:9	automated 62:24 63:20 64:4,20 65:3
action 10:4 22:7	advocating 49:21	amended 83:19 84:2,4,15	appropriate 19:15	automatic 18:6
activity 4:20 56:19 78:2,23	Affection 4:10	amending 2:22 37:7	approval 64:22	automation 65:5
Actman 60:23 66:13 75:11,13 75:13,17,22	affordable 11:14 26:8	amendment 6:1,5 6:8,11,14,17 35:14 83:7	approved 84:23	automobile 26:15
actual 55:16	afternoon 7:20 21:5,6 45:18 49:14 53:3 61:2 61:3 63:10 65:21 66:19,23	amendments 5:22 40:16,20 41:7 65:12 82:9,11 83:8,11,12	approximately 14:23 54:2 61:17	availability 18:6
add 21:23 36:2	age 73:13	America 22:14	architecture 58:3	available 10:9 16:8 24:5 57:2 62:18 74:2,10 74:11 77:13 83:12
	agencies 55:19 76:5	Americans 14:19	area 8:13 17:21 78:16	average 51:21 55:8 78:10
	agency 4:6 7:10 46:11 49:6	amount 44:23	areas 24:4 63:2	averages 31:13
		analysis 23:22	armed 16:4	avoiding 11:11
		analysts 56:6	ARRA 5:12	award 20:8 62:5 71:21
		analyze 81:5		

aware 11:16	9:3 11:22 12:11	66:5,15 67:20	51:17	75:14 76:11
awareness 10:4	13:8 14:5 16:5	69:8,11,17	broad 51:4	79:16,17 80:2
82:5	17:2 18:20 20:1	71:15 72:14	broader 13:5	80:23 81:3,21
aye 83:20 84:12	23:5,9 24:3 25:5	73:10 74:15	broken 23:3	buildings 2:10,11
84:20	26:18,21 34:24	82:10,12 83:4,7	Brotherly 4:10	2:12 3:2 8:3
eyes 83:21,22	37:12,19 46:14	83:13,14,18	Brown 7:20 8:5	9:21 10:23 11:4
84:13,21	46:17,19 47:14	84:1,3,14,22	13:21 50:9 83:6	11:8,16,19 12:5
	47:16,23 48:7	billing 63:7	BTUs 71:11	12:12,20,24
	48:15 50:7	billion 14:24	budgets 10:17	13:20 14:6 15:6
	51:13,18 52:11	21:20	46:7	15:12,14,19
B	54:12 55:18	bills 13:3 14:11	build 10:3 56:19	16:19 17:5,16
B 27:7	56:9 58:9,19	14:24 16:1 47:1	building 6:2,6,9	17:17,21 18:17
back 16:7 30:16	63:8 67:6,23	47:8 62:20	6:11 8:19 9:14	18:21,24 21:20
34:10,12 41:5	68:15 69:9 71:3	80:18	9:16 10:7,10,17	21:22 22:5 24:6
backed 50:1	71:15 79:5,12	Bill's 17:7	10:24 11:10,22	24:8,16 25:1,8
background 4:16	81:6	bit 33:21 44:14	12:7,9,14,16,23	25:17,21 28:22
34:3 70:5	benefit 47:19	63:9 64:13	13:3 15:4,22	29:5,6,9 30:22
bad 6:24	55:24 67:17	Blackwell 1:12	16:2,13,18,22	31:10,12,20
barely 78:13	benefits 48:8,15	2:17 65:15,19	16:23 17:4,8,11	32:13,14 46:9
base 27:23 32:18	benefitted 46:15	65:22 84:10	18:8 19:13,17	46:24 47:14,18
based 5:20 26:12	47:13	Blondell 1:11	19:18,18 21:10	47:20 48:11
29:18 35:4	best 2:13 62:13	36:3 40:16	22:16,21 25:15	50:20,24 51:7
46:13 61:18	65:17 67:18	58:10	25:18 26:4,12	51:13 52:2
64:24	better 43:16 51:6	body 35:12	26:18,24 27:2,6	53:10,23 54:3,4
basic 17:1 54:14	60:14 72:9	BOMA 4:14 7:13	27:12 28:10	54:8,12,16,19
79:17	73:11,17 82:12	21:12,15 22:4,6	30:17 31:16	55:1,7,9,14
batch 30:22	beyond 72:3	22:18,23 23:8	32:3,4,18,24	56:11 57:10
bears 51:20	big 5:3 11:19 37:3	23:18,22 24:15	38:19 39:21	58:23 59:14
becoming 12:16	37:4,4	25:4 26:10	40:18 41:15,22	67:4 68:4,10
52:10	bill 1:15 2:5,21	28:12,24 29:2	41:24 42:1,2,3	70:17 71:14
beginning 12:15	3:6,19 4:16 5:24	36:18 41:17	42:11,12,23,24	73:10,11,15,16
begun 12:11	6:4,15,15 8:1,8	44:5 57:19	43:6,21 44:17	73:17,19,20,21
behalf 14:2 45:9	8:14 13:12,24	63:11 66:4	44:23 45:24	73:21 74:14
83:6	14:8 16:17	BOMA's 24:12	46:21 47:10	75:24 76:8 77:4
belief 3:8	17:15 18:12	Bonner 61:6	48:1,3,14 49:4	77:21,23 78:4
believe 10:15	21:14 22:22,24	bore 70:10	50:15,22 51:9	78:14 79:5,10
27:21 36:7 60:2	25:23 27:4 28:7	Boston 67:9	51:21,23 53:8	80:3 81:17
63:3,5 64:15	29:24 33:13	bottom 32:9	54:13,18,23	building's 25:6,7
67:20 76:12	36:8 38:21,23	BPG 21:8	55:3,13,23	25:13 26:9 28:1
77:10	40:13 42:9 43:9	brain 33:20	56:17,20 57:18	54:16,23 55:12
believes 64:6	45:20 46:18	Brandywine 7:13	57:23,24 58:2,4	built 17:11
benchmark 12:3	47:2 48:16 50:6	20:24 78:17	58:4,22 59:2,3,5	bulk 17:5
16:19 24:21	50:7 52:8,15	brief 30:12 67:1	59:11 60:6	Burr 4:7 60:20
58:23	53:4,7 55:24	75:18	62:12 68:15,16	66:12,21,21
benchmarked	56:5,16 57:4,5,8	briefly 19:10	69:6 70:19	business 24:9
17:18 24:16	57:9 58:9,11,18	bring 59:6 73:23	71:10,18,22	38:7
55:1	59:19 60:3,14	bringing 50:10	72:1,6 73:13	businesses 5:10
benchmarking				
3:1 8:2,19,24				

10:2 15:11 16:10 32:10 51:4 68:7	certifying 86:21 Chair 1:11 13:21 21:7,10 30:11 34:6 66:22 83:2 83:5,24 Chairman 7:21 75:20 chairs 30:4 Chairwoman 7:20 8:4 13:21 challenge 11:20 challenges 9:1 10:22 15:9 32:4 81:9,16 champions 29:4 chance 70:4 change 6:17 14:13 33:2 changed 6:1 changes 6:5 19:20 chapter 2:22 57:24 character 21:23 characteristics 77:18 charge 46:2 charges 61:22 cheapest 56:2 57:1 chef 26:15 children 73:6 choice 68:10 choices 3:10 52:14 cholesterol 70:24 70:24 71:1 chosen 18:14 circumstances 27:20 47:21 cities 8:20 9:3 15:2 18:13 60:1 67:5,7,19 68:1 68:13,22 78:11 citizens 51:5 city 1:2,6 4:10,18 4:24 5:12 7:21 10:21 11:21	12:11 13:10 16:6 18:16 21:17,22,24 22:1,7,12,13 28:14,23,24 29:2 32:14 37:16,20 42:7 44:7 49:5,12,19 50:1,5,6,12,14 50:16,21 51:16 52:15,23 54:3 55:19 56:9,10 57:5 59:21 61:16,20 63:18 67:8 74:16 75:8 75:9 76:14,24 77:4,5,11 78:21 81:5,21 citywide 2:7 29:14 City's 3:17 8:11 11:9 12:8 26:13 27:23 29:11 49:8 52:11 54:1 56:13 67:21 77:8 City-wide 9:14 10:7 11:6 civic 50:3 civic-minded 22:5 Civil 70:7 clarification 41:14 44:4 clarifies 6:8,11,14 clarity 45:6 class 23:13 25:19 27:7,7,8 46:1 classification 31:20 40:18 classify 30:23 clean 56:15 cleaner 50:4 cleanest 56:2 clear 11:5 35:2 clearly 17:24 22:2 54:10 Clerk 2:20,22	clients 70:15 71:24 climate 14:13 close 8:21 closer 82:12 closing 18:20 cluster 76:2 coalition 3:11,24 22:16 49:12 50:6,16 51:1,3,4 51:14 52:15 code 2:23 48:6 Codes 29:23 collaborate 22:11 collect 41:24 collected 16:24 18:16 28:21 collective 3:21 10:3 collectively 29:3 Columbia 4:24 67:13 come 4:15 11:3 34:11 40:4,24 41:5 45:13 60:1 74:20 81:11 comes 26:17 28:18 comfortable 55:5 59:15 coming 20:9 42:17 58:13 commend 57:6 62:6 commended 18:23 comments 57:15 commercial 6:1,6 8:3 9:5 10:23 11:8 13:20 14:6 18:21 24:4 28:16 29:9 40:18 44:17 50:20 51:13,20 53:23 54:4,24 55:7 76:10 78:14,15,19	79:1,3 80:16 Commission 64:23 commissioned 50:16 77:19 commissioners 81:2 commitment 8:5 committed 80:13 81:19 committee 1:3 2:4 2:16 3:5 5:14 7:1,22 13:22 18:23 19:5 21:7 21:13 29:23 30:4 50:8 52:16 62:7 66:23 74:24 75:4,21 82:15,19 83:1 84:4,16,23 85:4 common 9:1 49:22 56:19 commonly 21:11 Commonwealth 76:6 communities 5:6 5:8 6:18 community 5:4 13:6 22:9 24:4 29:15 56:20 companies 18:1 79:4 company 21:9 27:16 30:18 46:15 47:13 61:5 62:8 70:15 comparable 2:10 compare 2:9,12 54:23 compared 33:18 54:6 comparing 12:5 30:16 comparison 25:19 30:24 31:22 71:14 comparisons 32:1
--	---	--	--	--

compatible 64:12	82:14 85:2	context 71:13	16:15 19:21	61:10 62:7
compete 76:18	concluded 85:4	continue 3:16	22:10 52:3,4,6	65:13,15,19,22
77:14	conclusion 81:19	29:24 44:22	52:13 54:8 55:4	66:1,11 69:13
competition	conditions 3:3	52:9	55:16 64:22	72:21,24 73:2,5
23:15 76:3	condominiums	continues 9:22	68:6 80:17	74:17 75:15
competitive 23:10	53:23 54:4 57:8	contracting 18:10	costs 33:24	82:2,22 83:9,16
32:9 73:24	conduct 24:9	contribute 29:11	cost-effective	83:17 84:8,10
competitiveness	confidentially	53:24 77:7	49:22 59:13	84:11
11:11	23:20	contributing	62:14	country 10:12
complaints 55:6	confusion 38:14	76:16	Council 1:2 2:16	15:18 20:4
complete 23:22	congregations	control 12:18	5:14 7:22 22:21	26:20 42:21
26:3	15:17	27:13,19 32:19	48:14,18,20	55:2
complex 63:22	consequences	32:19 33:3	49:4,14 50:22	couple 30:8
65:5	27:4	86:20	51:11 52:17	courses 22:7
compliance 23:6	conservation 2:24	controls 26:16,18	57:5,7,15,18,23	cover 29:20
28:7 38:13	8:16 53:15	convened 51:1	57:24 59:21	covered 6:2,6,12
compliment	conservatively	conversation 35:9	65:8,14 66:5	Cozen 51:8
65:24	21:19	56:22	76:14 84:6,7,17	co-ops 53:24 54:5
comply 81:18	consider 12:17	conversations	Councilman 1:11	57:8
component 57:4	27:10	44:19	1:12 2:19 30:11	create 50:4 56:5
71:15	consideration	conversions 32:17	31:23 34:5,11	68:7
components	52:16	Cook 4:5 7:8	34:21 35:8	creates 56:3
26:17	considered 64:8	13:15,17,18	82:17,20 83:3,5	creating 5:11
composition	71:21 72:16	19:16 20:3,13	84:1,3	49:20
31:17	considering 26:21	20:18 41:4,13	Councilmember	creation 56:1 75:4
comprehensive	consistent 52:22	41:21 42:15,19	75:3	76:10
8:11 55:12	64:14 65:4	43:3,15,20,24	Councilwoman	critical 3:17
compromise	consistently 19:7	cooling 55:15,23	1:11,12,13 2:2	18:21 52:12
35:12	constantly 23:11	coordinated 64:1	2:17 3:4 13:14	57:3 70:19
computers 27:15	constituents	64:5 65:7	19:4 20:2,11,14	71:15
27:17	20:15	coordinating 49:6	20:20 22:19	current 48:6
consumption	constrained 10:17	50:23 53:6	30:6 31:6 34:9	currently 18:7
55:17	constraints 33:10	57:14	34:20 35:1,17	28:4 51:22 54:4
Con 42:8,22	construction 9:16	coordination	35:18,21,22,23	curtail 52:5
43:15	25:18 32:21	50:21	36:1,2,10,11,13	Curtis 1:12 2:19
concern 5:5,9	58:3	Coordinator	36:16,23 37:8	30:10
19:11 31:1	consume 54:6	49:13,16	37:13,18,24	custom 4:4
32:23 36:4	consumer 68:6	copies 41:7 82:10	38:4,9 39:11	customer 42:10
40:18	69:1	core 64:7	40:3,9,11,15,16	43:16 63:6,20
concerned 22:24	consumers 59:6	cornerstone	40:21 41:3,11	customers 17:9
26:7	60:5	15:18 62:10	41:16 42:13,16	18:11 61:21,22
concerns 5:21	consumption 3:22	correct 32:11	43:2,11,19,22	62:23 63:13
20:16 29:18	16:22 19:1 26:5	37:15 39:23	43:23 44:1,3,20	65:1
35:4 59:17,18	32:7 33:4,21	86:9	45:2,5,17 48:20	C-E-E-P 51:2
63:2,12 69:16	54:3,17 70:22	cost 2:14 3:23	48:24 50:9	
concert 29:2	contact 8:21	11:11 12:18	52:20 57:6,13	
conclude 74:24	contained 86:6	14:10 15:9,10	58:10 60:10	
				D
				D 1:13

data 3:2 8:3 9:7 10:9 12:23 17:1 17:2,5,6 18:6,6 23:21 24:20 28:14,19,21 37:10 39:12,22 41:18 42:1,2,3 43:7,8,17 52:7 58:15 60:5 63:20 64:11 68:24 69:1 80:23 81:3,6	detail 23:21 details 44:9 devastating 27:3 develop 56:24 63:14 64:16 developed 16:12 43:15 64:5 developing 22:17 55:11 development 63:23 Dews 7:10,18,18 7:23 41:4 44:3 44:21 45:3 different 3:10 5:22 30:22 31:10,10,15,17 differentiators 23:14,16 difficult 47:9 diffuse 78:14 direct 73:12 86:20 direction 54:13 directly 63:21 81:4 Director 45:21 46:4 57:22 75:23 disclose 28:22 74:1 80:19 disclosed 28:19 34:2 disclosing 13:8 disclosure 8:20 9:4 23:5 26:1,7 26:11,13,22,23 37:4,9,11,14,16 37:17 44:8,12 46:18 48:16 58:19 66:6 67:6 67:24 68:22 69:5,10 72:12 73:9 discover 2:14 discuss 51:18 discussed 44:11 62:18	discussing 5:18 discussion 35:13 discussions 63:13 distinct 23:4 distress 69:7 distributed 31:14 distribution 61:5 District 4:24 43:17 67:13 doable 60:6 doing 28:16 dollars 11:12 27:2 33:17 48:2 76:23 Don 4:13 Donald 31:8 Doug 7:12 20:23 21:8 download 63:20 downloads 62:24 Downtown 45:24 drafted 37:7 draw 27:17 dries 68:11,11 drive 32:7 driver 21:24 driving 9:2 dual 76:7 due 5:1 DVGBC 29:3 59:20	economics 70:6,9 74:6 economy 8:14 10:15 11:13 14:14 56:13 Ed 42:22 65:16 Edison 42:8 43:15 educated 25:24 79:9 education 11:23 26:3 78:24 effect 23:2 55:23 effective 5:2 6:17 11:23 14:18 15:10 26:5 52:14 59:22 60:3 effectively 24:22 25:9 76:18 Effectiveness 4:11 efficiencies 24:2 efficiency 8:7 9:2 9:5,22 10:4 11:13,19 14:9 18:22 22:3 25:14 26:14 29:11,13 33:13 46:12 48:11,13 50:14,19 51:7 52:10 53:8,11 53:14,22 54:11 54:15,20 56:2 56:22,24 61:14 61:24 62:9,12 62:15 67:4 68:4 68:19 76:8 77:8 78:23 efficient 3:11,15 4:1 9:16 10:19 13:10 14:18 25:16 31:18 48:3 50:24 51:1 51:3 59:1,22 75:14,23 79:1 efficiently 24:6 47:18 55:4	effort 76:21 80:8 80:12 81:8 efforts 5:6,15 either 18:8 26:21 32:20 37:17 62:20 electric 33:15,17 33:21,23 61:5 electrical 27:17 30:19 48:4 electricity 42:12 42:24 54:7 61:21 76:24 electronically 17:12 62:20 elephant 5:3 eligible 25:21 54:21 Elizabeth 49:7 60:18 embarrassing 28:23 embraced 69:19 emissions 8:17 11:3,7 14:21,22 19:22 54:1 62:15 68:6 emphasize 62:17 employed 56:14 enable 25:23 79:8 enabled 76:17 enables 23:19 24:5,20,24 54:22 encourage 29:8 34:18 40:22 42:2 51:12 60:9 encouraged 56:18 encouraging 29:14 80:24 endorse 22:6 endorsement 14:3 ends 31:21 energy 2:9,24 3:1 3:11,15,15,16 3:22,24 4:1 8:2 8:7,13,16,19,23
		E		
		E 86:1 earn 19:24 22:13 ease 43:9 easier 80:23 easily 27:5 37:6 easy 15:9 46:15 46:20 59:13 ECA 53:6,13,16 ECA's 57:3 echo 79:14 economic 3:17 21:24 29:12 33:1 52:11 56:8 76:9 81:23		

9:2,3,5,12,14,16 9:20,22,23,24 10:2,4,7,10,16 11:1,7,12,13,16 11:19,22,23 12:1,17,17,19 12:23 13:4,8,10 13:19 14:7,9,10 14:11,16,18,19 15:3,5,8,10,12 15:19,24 16:1,8 16:11,14,16,19 16:21 18:9,20 18:22 19:1,12 19:19 20:8 22:3 24:11 25:7,14 25:22 26:5 27:1 27:24 28:17,21 29:10 32:7,11 32:15,17,23 33:4,8,12 41:15 41:22 42:1,17 46:10,11,13,16 46:18 47:7,15 47:16 48:3,6,6 48:10,11,13,15 49:6 50:7,14,19 50:23,24 51:1,3 51:7,13,18 52:1 52:5,9,9 53:5,8 53:11,14,15,17 53:19,22 54:3,5 54:9,11,15,17 54:23 56:2,3,5 56:13,15,21,23 57:2,2,10,14 58:9,24 59:1,14 60:24 61:14,18 61:23 62:5,9,12 66:14 67:4,9,12 68:3,5,6,14 70:3 70:17,21,22 71:10,17,22 72:4 73:13,19 73:22 75:14,23 76:1,5,8,11,19 77:1,7,8 78:9,22	79:1,18 80:4,19 81:23 energy-efficiency 54:7 57:1 energy-efficient 47:24 engaged 63:17 engagement 8:14 engaging 51:16 engineering 58:4 70:6,8 enhance 49:23 enormous 11:20 ensure 5:5 59:22 enter 47:5,7 entered 47:1 entering 46:20 entire 16:23 21:13 40:1 entirely 63:8 entitled 2:23 envelope 55:13 72:6 environment 1:3 2:5 3:5 7:22 8:13 19:8 67:12 67:14 75:5,7 82:15,20 environmental 4:6 7:9 13:19 46:11 49:17,23 70:7 EPA 14:2 15:9 16:12 39:19 40:24 54:20 62:5,17 EPA's 12:2 24:17 54:17 equal 35:13 equally 23:24 equals 3:22 equipment 10:18 55:14 equity 8:14 equivalent 14:22 62:1 especially 68:7	79:2 essential 9:8 establish 55:19,21 established 28:17 76:1 estate 9:5 23:3 24:4 38:6 58:3 69:1 73:24 77:18 78:17 EUI 71:11 event 29:4 events 51:15 evidence 86:6 exact 31:22 example 27:14 30:18 47:14 77:2 exceed 48:5 exchange 23:19 23:21 exciting 74:19 excuse 34:6 Executive 57:22 Exelon 62:8,10 exemption 39:12 exercise 17:2 40:2 exist 44:15 existing 18:24 55:7 67:15 68:4 68:10 79:8 expanded 9:17 expenditures 78:9 80:20 expense 33:14,17 expenses 27:10 experience 15:21 16:3 23:19 42:5 46:14 56:8 60:2 experiences 8:23 exploited 23:17 exploring 81:1 express 50:5 extensive 37:1 exterior 31:16 Extreme 10:12 extremely 23:10 28:10	E-RIC 76:7 <hr/> F <hr/> F 86:1 faced 10:21 facets 22:23 facilitate 26:2 facilities 12:11 facility 46:6 fact 20:6 23:18 25:6,20 61:15 factor 10:12 fair 60:6 faith 50:3 fall 12:15 77:19 far 12:6 fashion 29:1 Fast 69:17 fault 32:16 favor 72:14 73:8 83:20 84:9,11 84:20 favorable 84:5,16 84:24 favored 50:18 feature 17:13 features 23:1 February 38:24 39:1 76:3 federal 76:5,23 fee 64:24 feel 9:3 69:5 feeling 5:4 73:24 feet 6:2,3,7,7 12:12 21:17 46:1 77:22 78:8 fewer 55:6 field 60:4 fifth 6:13 figure 5:7 43:13 43:14 44:14 66:8 fill 39:3,9 41:18 final 6:16 60:19 finalized 63:16 finally 65:1 78:12 financial 24:1	68:9 69:7 find 2:11 14:18 34:12 55:13 60:3 finding 20:5 fire 12:3 firm 27:14 33:19 33:23 firms 51:8 58:5 first 5:24 7:6 12:19 14:1 18:15,17,21 23:4,8 30:6,9 44:6,12 51:12 53:11 54:12 58:17 63:5 64:10 70:20 77:17 84:6,18 fit 33:11 fits 33:5 fitting 33:10 five 4:19 75:6 83:10 fixed 12:18 40:8 flaws 24:20 flexibility 17:8,10 flexible 67:21 flip 39:15 focus 24:1 focused 10:2 folks 58:13 62:19 79:14 80:11 follow 66:3 followed 8:18 49:7 followers 59:7 80:1 follows 5:23 food 68:21 foot 33:18 71:10 footage 78:7 forces 74:7 forcing 27:1 foregoing 86:8,17 forgive 45:12 form 28:14 56:3 formally 75:18
---	---	--	---	---

format 64:11	49:18,21 51:11	71:5 72:12	39:14,23	highlighted 23:23
formatted 63:1	52:14 56:12	77:24	half 10:24 21:18	highly 70:10
formerly 24:14	75:7	government	54:9 77:23	highway 62:3
formula 41:1		10:21 11:21	82:23	high-rise 21:21
formulate 2:13	G	34:14 63:7 77:4	Hall 1:6	32:14
forth 40:17 50:11	gain 53:11	governments	hand 53:12	Hoffman 7:13
69:4	gap 52:12	15:16	happens 20:21	20:24 21:6,8
forums 51:15	gas 8:16 11:3,7	great 9:12 27:17	28:4	31:3 33:14
forward 5:15 7:11	14:21 19:21	49:5,12,19 50:1	happy 13:12	35:20 38:11
21:1 22:9 45:13	54:1,7 68:5	50:5,12,16,21	20:18 30:2	holder 11:17
66:8 69:18 80:8	gather 39:12	52:15,22 74:16	52:18 67:14	home 53:16
81:8,16	46:22,24 47:5	77:2	hard 80:19	homework 85:1
found 42:23 46:18	Gathering 46:20	greater 12:6 22:8	hardest 46:22	honor 7:4
68:13 70:9	general 17:10	56:21 76:12	headway 9:23	honored 62:4
71:24 73:11	generally 55:5	greatest 12:7 25:7	healthier 50:4	honoring 6:20
77:22 78:1,4,8	generate 78:2	32:22	hear 2:5 3:6 6:23	hope 4:22 5:13
78:12	80:7	greatly 25:19 26:9	13:15 30:9	29:24 59:20
Founder 82:19	gentlemen 35:24	green 5:11,18	83:15 84:9	hopes 48:13
four 64:7 69:16	getting 60:13 62:2	22:21 49:4	heard 51:19 58:16	Hospitality 19:16
75:6	79:16	50:22 53:20	63:9	hospitals 15:16
fourth 6:10 78:10	Gilmore 22:20	57:18,23,24	hearing 3:6 40:22	hosted 51:15
four-year-old	give 39:16	58:2 66:5 81:12	66:17 75:1	hotel 19:23 20:6
73:18	given 26:7 29:7	greener 75:9	82:14	hotels 15:17 19:11
fraction 26:19	gives 54:13 58:15	Greenest 22:13	Hearings 7:16	19:11,14,16
frame 10:8	giving 21:13 32:2	greenhouse 8:16	heat 55:22	20:3 31:11
frameworks	70:4	11:3,7 14:21	heating 55:15	hour 82:8
67:18	global 14:12	19:21 54:1 68:5	heightened 82:4	Hub 50:24 60:23
Francisco 8:22	go 19:15 29:12	Greenworks 8:10	held 63:14	66:13 75:11,14
67:12	73:14 78:1	8:12 9:8,13,18	help 14:19 15:11	75:24 76:1,7,19
free 12:2 15:10	82:16	77:2	18:5 19:10,13	Hub's 77:8
16:16,20 33:9	goal 3:21 9:13	grouped 31:12	43:9 50:24	huge 55:23 78:22
front 15:8	29:14 35:7	groups 31:9 34:7	56:24 70:18	Huh 73:1
fuel 26:14 68:19	51:12 76:10,13	50:2,2,3 51:9	75:8 76:13 80:6	hurdle 79:21
full 6:19 82:12	goals 8:13 28:17	grow 14:13	81:5	HVAC 31:15 48:3
fully 34:23 75:6	77:1,3,9	growing 8:19 67:5	helped 14:17	55:14 72:7
86:6	goes 72:3	grown 17:19	helpful 17:14	
functionality	going 5:14 11:12	48:12	20:12	I
17:11 18:3	34:5 58:12 66:3	growth 76:9	helping 10:3	idea 32:2 73:9
functions 15:15	68:8,17 69:6	guess 38:15 43:13	14:13 56:7	ideal 29:15
Funds 5:12	70:20 72:11,14	guy 65:19	81:20	ideas 10:1 60:14
further 20:19	gonna 72:12		helps 74:12,12	61:19 62:6
24:10 35:13	good 6:24 7:20	H	high 16:1 30:19	identify 54:19
65:11 77:11	12:1 13:4,4 21:5	Haas 4:13 31:5,8	32:13 71:19	identifying 18:23
Furthermore	21:6 44:14,22	31:8 32:11	higher 50:13	impact 10:16 23:1
17:7 25:9	45:18 49:14	33:24 34:23	56:12 79:21	25:7 26:22
furthest 29:7	52:1 53:3 61:2,2	35:17 36:9	highest 78:10	27:22 47:22
future 49:5,13,17	66:18,18,23	37:16 38:3,6,13	highlight 77:16	72:4

impacted 27:22	8:15 28:24	informative 30:7	internal 25:18	30:10,11 31:23
implement 2:6	53:23 56:9 58:6	informed 3:20	international	34:5,11,21 35:8
implementation	63:18 67:8	26:1	77:12	82:17 83:3,5
8:10 17:15	80:18	infrastructure	intriguing 34:13	84:1,3
59:17,23 60:16	income 53:14,19	48:4 77:1	introduced 42:9	JR 1:12
64:15 67:18	increase 10:6,14	ingredients 26:16	introducing 58:11	judgment 57:3
80:9 81:20	11:2 17:23	initial 40:8 46:21	invest 27:2 47:24	June 1:7 44:8,8
implementing	50:19 68:3	47:5,11	76:24	jurisdictions 42:6
9:10 67:5,10	increased 9:21	Initiative 49:20	invested 48:2	43:4
80:22	10:10	initiatives 5:8,12	investment 54:18	
importance 22:4	increases 11:10	5:15 9:11 76:15	76:18 77:13	K
important 2:4 9:4	increasingly 3:17	innovation 76:2	investments	Karen 49:5 53:2,5
14:12 23:24	52:10	76:19	47:19 48:9	59:9
45:7,20 52:8,10	incredibly 51:22	innovative 50:10	invite 7:7 30:4	Katherine 22:19
52:22 53:4	independence	inputs 12:22	60:18 66:12	KBTUs 71:11
58:14,18 60:7	3:16	inputted 24:20	involved 80:12	keep 69:2
70:16 71:4	indication 25:13	insight 12:6	island 55:22	Kenney 1:11 7:21
73:23 77:12	indicative 32:24	Insofar 26:7	issue 14:12 19:8	13:22 75:3
importantly	indicator 9:19	inspectors 56:6	27:9 37:4,12	82:20
54:21 56:4	31:19	installers 56:6	41:1 62:8 63:15	key 26:6 77:16
impose 34:17	individual 12:6	instance 18:10	65:10 66:6	79:13 81:6
improve 45:1	individuals 14:17	42:8 43:5	74:20	kids 72:18
48:10 54:15	15:7	instances 25:10	issues 7:2 8:6 23:7	kila 71:11
61:16 68:17	industrial 10:23	Institute 4:7	26:8 36:9 44:16	kind 36:2 39:4
improved 8:17	industry 12:21	60:21 66:12,21	50:12 59:24	42:6 64:1 70:18
55:15	19:17 20:5,17	67:2	63:12,22 64:7	71:13 73:23
improvement	23:9 51:9 53:9	instituted 5:1	72:6 80:9,13	77:20,23 80:7
26:5 46:7 52:2	58:2	institutionalize	items 36:4,7 37:2	80:10 81:2
improvements	inefficient 51:22	68:14	38:10	KING 86:13
18:3 19:20	55:10	institutionalizes	i.e 68:15	kinks 44:15
34:19 48:1 54:8	influenced 26:9	69:9		Knight 53:20
54:20 57:1	information 3:8,9	institutions 51:5	J	know 6:22 16:1
62:15 68:4 80:3	6:9 13:2 15:13	instructive 30:8	J 21:3 45:10	19:12 20:12
improving 11:9	16:4,6 17:1 26:3	integral 24:3	James 1:11 75:3	21:15 33:22
14:10 16:10	28:1,5 29:1	intellectual 33:20	82:20	34:15,17 36:22
76:8	37:20 38:17,19	intended 14:4	Janet 49:3 57:21	38:14,15 43:11
IMT 67:6 69:10	38:24 39:2,4,16	25:23 33:22	79:23	43:13 44:15
incentives 58:20	42:12 43:9	41:22	Jannie 1:12 2:17	52:6 61:13
58:21 59:4 68:9	46:21,22 47:1,6	intends 81:24	job 56:1 76:9	65:16,18,20
79:9 81:10,13	52:12 54:14,22	intensity 54:24	jobs 53:20 56:4,4	66:2 67:4 68:16
inception 14:16	59:5 62:21 63:7	intentioned 22:22	56:5 68:7 78:3	70:12 71:4
include 21:20	63:24 68:18,21	interactive 16:15	John 21:3 45:10	80:10
46:5 57:7 60:20	69:21 70:16,18	interest 62:23	join 2:15 4:18,22	knowing 47:23
included 43:9	74:1,4,9,11,12	78:24 79:10	18:13 30:4	82:12
includes 21:2	78:20	80:7	74:24	knowledge 70:18
58:19	informational	interested 79:16	joined 2:18 61:5	known 26:23 51:2
including 3:10	13:24 14:4 19:2	80:2	Jones 1:12 2:19	
				L

label 26:14 71:22 73:22	learning 9:12	limit 7:4	M	74:13
labeled 25:9	lease 38:1 40:8	limitations 31:9	M 86:13	mandate 64:21
labeling 58:24 69:16,17	leases 80:16 81:10 81:12	limited 60:20	Madam 21:7 30:11 34:6 83:5	mandates 58:20
labor 50:2	leaves 67:20	limits 21:17	Madonna 50:17	Mandating 28:4
lack 47:21	led 4:20	line 32:9 45:6	maintain 32:8	manner 63:9
Lady 57:15 65:14	LEED 9:20 24:11 25:20 59:3	lines 15:8	maintaining 65:2	manufacturer 26:16
landlords 56:23	73:20	link 20:21	maintenance 10:22 46:6	manufacturers 27:16
landscape 63:6	left 41:8	lion 33:3	major 10:12 18:24 21:21	manufacturing 30:18
language 29:18 35:4 38:22	legal 63:5,11	Lipitor 71:6	39:24 78:11	March 20:7 39:1 39:1
large 2:9 5:9 8:3 17:4,6 23:10	legislation 4:18 4:22 5:1 6:20	list 4:18 28:22 65:3	majority 2:18 30:10 79:2	Maria 1:13 2:16 35:23
32:14 51:17 53:13	14:3 22:17 23:1	listed 19:12 36:4	82:17 83:2,24	Marion 82:22
larger 79:4	29:23 37:7 39:6	listening 34:12 82:23	making 13:9 19:5 69:20	market 4:7 9:6,22 17:24 23:13
largest 11:17 78:17	44:6 50:11	literature 3:13	manage 11:15 15:20 70:19	45:23 46:3,4
Lastly 5:20	59:10 61:8	little 17:3 33:21 37:5 63:9 64:13 74:5	79:15 81:5	60:21 66:12,22
latest 76:20	62:16 63:15	live 58:6	managed 34:16 55:3 73:16	67:2 74:6,8
Laughter 38:8	64:9 74:7 76:13	Liz 61:4	management 11:24 13:4	77:18 78:21
Laurie 60:22 66:13 75:11,13 75:22	77:10,15 80:5	loads 55:23	16:16 17:6 21:9 46:8 72:7	80:6 81:16
law 27:14 30:19 33:19 43:12	81:18,22	local 11:13 14:14 15:16 16:10	Manager 7:23 12:2,13,21	marketing 24:13
51:8 58:5 72:10	legislative 22:19 59:19	56:5,7 57:23	13:18 14:7	markets 26:20
72:16,16 73:8 74:12	legislatively 39:8	63:17 78:3	16:12,15 17:19	marking 28:9
laws 26:22	legitimate 20:16	Locally 17:20	18:4,14 20:1	materials 41:8
lawyers 33:19	lenders 58:5	locate 74:14	24:17,19 25:10	matrix 41:18
lead 16:7 49:18	lens 34:15	location 69:4	25:12 26:17	matter 28:12 86:8
leader 2:18 30:10 61:14 76:17	Leslie 4:5 7:8 13:15,18 41:4	long 29:12 67:8 68:10	28:14,21 31:9	matters 5:19 34:8
77:12 82:17	lessees 2:8	look 38:11 72:11	39:3,10,18 40:2	Mayor 76:14
83:3,24	lessons 15:6 81:7	looked 77:21	41:21 42:21	Mayor's 7:10,18 8:9 13:7 22:20 35:15 66:4 67:8
leaders 29:4 59:8 80:1	letter 27:6 28:10 32:3,23 43:20 68:23 72:2	looking 22:9 23:13 34:4 41:14 62:7 68:22,24	45:1 46:19 47:2	McBride 65:16
leadership 5:16 8:6 19:6 24:13	letters 43:8	looks 69:2	47:12 54:18	McClure 4:13 36:15,18,18
48:13 50:10	let's 45:11	lot 15:1 27:15 44:18 58:15 59:23 69:20	62:18,22 63:1	37:3,11,15,22
57:7 58:11 60:8	level 43:1 60:4 71:1	lots 20:9	63:22 64:2,4,12	39:17 40:13,19 41:10
65:9 77:15	leverage 79:8	Love 4:10	64:18 71:17	McCullough 21:3 45:10
learn 8:22 59:12	Lews 35:6	low 16:2 27:9,20 32:23 53:14,19	managers 13:2 15:5 16:13 20:7	mean 31:23 71:2 71:12
learned 15:6 34:13 60:2 81:7	liability 63:12	lower 55:4 72:13	21:11 23:20	meaningful 11:6 26:2 39:9
	Liberty 78:18	lowering 55:16	24:1 29:10	means 11:12 55:9
	light 73:11	lowest 14:9	managing 12:19 47:17 70:16	
	lighting 48:4 55:15,16 61:17			
	61:18 72:8			
	likened 70:23			

60:4 72:2,5,8 86:19 measurable 8:12 52:7 measure 4:23 15:20 16:14 19:19 41:22 48:7 79:15 measured 9:10 34:16 measurements 41:15 measures 52:4 mechanical 55:11 mechanism 16:17 meet 4:4 48:5 meeting 2:4 75:1 82:16,24 85:3,4 meetings 5:20,22 member 21:20,22 22:5 24:15 members 2:16 3:11 4:14 5:13 5:14 7:8,21 13:22 19:5 21:7 21:16 23:9 24:12 29:14 48:19 49:2,14 50:13 51:7,14 58:1 59:16 66:23 74:19,23 75:20 membership 5:16 men 53:21 mention 32:1 82:19 mentioned 28:9 33:18 80:21 menu 26:13 69:16 69:17 merit 63:3 message 74:23 messages 79:13 met 4:2 meter 38:17,19 metering 80:15 method 22:16	metric 14:20 69:6 Michael 21:2 45:10,16,20 mid 78:15 middle 6:13 Milkman 49:3 57:21,21 79:24 million 14:20,23 21:17,18 46:1 48:2 61:21,22 62:2 76:4,23 78:2,7 mind 33:12 minor 39:24 minority 5:10 minutes 7:5 17:3 misleading 34:3 mission 76:7 mix 46:23 moment 75:2 money 15:24 33:7 33:10 54:22 57:10 59:15 68:11 moniker 22:13 month 47:9 months 12:10 16:24 51:14 morning 66:18 motion 83:3,23 84:1 move 6:19 7:11 7:14 25:2 27:11 27:12 29:6 52:15 60:22 66:8,16 74:22 75:1,10 80:8 81:16 82:11 83:7 84:3 moved 83:14,18 84:14,17 moves 81:8 multiagency 76:6 multifamily 76:11 Municipal 67:10 Murphy 49:7 60:19,24 61:2,4	61:11 65:18,20 65:23 66:10 Murray 21:2 45:10,16,16,18 45:20 48:23 <hr/> N <hr/> N 86:1 name 7:17,18 13:17 21:8 31:7 36:14,17 45:14 45:20 49:9,11 49:15 52:24 53:2,5 57:21 66:19 68:23 69:24 70:2 nation 17:17,18 national 12:4 14:14 20:4,8 24:24 53:22 67:3 76:3,18 77:11 78:10 nationally 16:9 nationwide 14:17 18:1 nation's 4:9 15:8 natural 22:9 32:6 51:10 54:7 nature 30:3 Navy 76:2 near 21:19 nearly 14:24 77:23 78:4 necessarily 33:12 necessary 2:13 need 20:14,21 51:24 52:6,7 54:14 59:3,4,6 66:8 71:7 74:7 75:8 78:23 needed 3:20 needle 25:3 29:6 needs 54:10 67:22 67:22 negatively 27:21 27:22 neighborhood	53:17 neighborhoods 49:24 53:11 never 22:10 nevertheless 22:24 new 4:20,24 8:21 18:16 25:1 42:7 56:10 57:2 61:18 64:1,3,4 67:8 73:21 77:6 78:24 81:4,12 newer 73:11,17 news 6:24,24 52:1 Nightingale 21:3 45:21,23 48:12 nonprofit 21:15 49:3 67:3 norm 28:2 normalizing 10:13 norms 24:24 notable 10:14 Notary 86:13 note 14:1 noted 86:6 notes 86:7 notion 26:23 nuanced 25:5 28:8 nuancy 37:5 number 5:20,21 7:2 9:20 17:19 18:13 20:6 25:11,11 31:1 32:13 38:10 42:20 67:5 69:18 71:8 81:11 nutritional 68:20 <hr/> O <hr/> O 86:1 object 28:13 objective 15:13 objectively 15:23 objectives 8:15	obsolete 64:17 Obviously 71:19 occupancy 13:1 80:17 occupants 26:12 occurring 10:11 offense 33:22 offer 7:16 58:8 66:4,9 83:6 offered 82:4 offering 5:22 offers 14:9 office 4:2 7:10,19 7:23 8:9 12:10 13:7 21:18,18 21:21 22:20 27:15 30:19 31:12 33:5 35:6 35:15 46:1 60:12 66:4 67:8 67:11 74:3 82:24 offices 15:16 offline 35:9 offset 10:6 oh 38:4 45:12 okay 20:2,11 35:16 37:18,19 38:9 40:21 42:16 43:2,22 44:20 45:2,8,17 57:15 60:16 65:13 75:17 old 51:21 55:8 73:10 older 73:15,16,21 once 16:3,23 42:8 72:15 ones 33:13 one-half 54:2 online 2:6 17:13 open 13:15 60:14 operate 24:6 60:12 operates 53:17,19 55:4 operating 23:21
--	---	--	--	--

24:2 25:1 27:10 46:6 operation 16:2 32:21 operations 10:20 10:22 45:21 46:2,4 operative 35:11 operators 15:22 24:24 58:5 opportunities 12:8 44:24 62:13 70:22 72:9 opportunity 11:20 13:11,23 18:24 19:2 21:14 29:22 48:17 53:3 55:18 57:11 59:10,11 65:8 66:24 72:3,23 75:21 77:20 opposed 83:22 84:22 opposite 31:21 opt 27:11 optimistic 82:6 options 17:5,6 oranges 30:17 order 11:5 25:2 36:5,20 52:5 ordinance 2:22 6:12 36:21 67:11 organization 21:16 22:6 49:18,19 67:3 organizations 6:18 14:17 15:12 18:7 20:4 22:12 51:6,10 ought 6:12 outcomes 81:24 outdated 51:22 55:10 outfits 48:5	Outreach 49:13 49:16 outset 22:2 outside 27:13,18 overall 10:6 25:7 25:13 29:12 47:22 overcome 32:5 overcoming 52:12 oversight 46:5 oversized 55:11 oweness 39:7 owned 79:3 owner 16:24 26:18 27:2 38:20 39:9 80:19 owners 2:7,11 10:17 12:16 13:1,5 15:5,22 16:13,18 17:8 17:12 18:8 20:6 21:10 23:2,19 24:1,21 26:4 27:13,18 28:23 29:9 33:1 41:24 42:11,23 43:6 43:21 44:17,23 47:10 48:14 51:23 54:13,18 54:23 55:13 56:17 58:4,22 59:5,11 60:6 68:15 74:1 78:13,17 79:1,8 79:16 80:2,23 81:14,21 ownership 78:15 owns 38:16 45:23 o'clock 7:1 O'Connor 51:8	49:6 60:19 paper 62:20 parent 62:8 parenthetically 69:14 part 18:9,17 24:3 29:15 33:6 38:14 41:17 46:22 64:8 70:8 82:18 partial 42:1 participants 56:24 participate 46:16 participated 51:15 participating 5:6 participation 46:13 47:22 particular 20:17 particularly 50:15 parties 3:20 30:1 Partner 20:8 partners 59:22 80:11 81:11 partnership 76:20 partnerships 15:2 55:19 parts 6:11 23:4 pass 20:15 57:5,8 60:9 passage 4:17 18:12 passed 4:21 42:9 72:16 passes 59:19 passive 55:22 path 18:22 Paul 60:23 66:13 70:2 pay 47:15 paying 33:13 51:23 71:9 pays 38:20 PECO 42:17 49:8	60:19,24 61:4,6 61:13 62:16,19 63:12,19 64:5,6 64:10,16,21 65:1,4,17 80:24 81:2,21 PECO's 10:1 peers 8:21 penalize 73:10 penalizes 26:12 penalizing 26:24 Penn 21:4 49:4,13 49:16,18 51:11 52:14 Pennsylvania 1:6 76:6 people 11:15 16:3 42:2 70:11,14 70:15 71:12 72:11,13,16 74:2,6,10,12 percent 9:14 10:6 11:2,3 17:19,23 24:15 50:17 53:24 54:5 61:17 76:11 77:3,4 78:5,9,13 78:19 perfect 74:9 perform 23:12 performance 11:17 12:24 16:11 18:10 19:20 41:23 42:4 48:7 53:16 69:5 performing 12:7 68:16 performs 24:23 period 45:3 permit 84:6,18 person 40:24 75:18 perspective 2:8 13:24 17:7 19:3 28:6 69:3 PGW's 9:24	Philadelphia 1:2 1:6 2:23 3:12 4:1 5:17 8:4,7 8:11,24 9:6,9,18 10:11,13 11:1 11:18 13:9 15:2 16:6,18 17:21 18:12 21:11,23 22:4,8,23 23:8 25:4 26:10 28:12 32:14 36:19 45:24 49:12,16,21 50:2 51:2,4,10 53:18,24 55:10 55:20,24 56:21 58:7 63:19 67:17,22 76:12 76:22 77:6 78:16 81:8 Philadelphians 50:18 52:13 Philadelphia's 11:4 22:18 51:20 55:7 61:4 76:16 78:8 philosophy 60:11 picture 27:7 37:3 piece 40:5 pieces 17:1 piloted 67:19 place 4:23 42:7 77:15 plan 8:12 9:10 55:12 Planning 67:9 plant 31:13,15 planting 62:1 platforms 63:23 64:3 playing 60:4 please 2:20 6:22 7:11,12,16 14:1 20:23 35:23,24 36:12 41:3 44:2 45:13 49:2,9 52:24 57:17
P				
page 5:24 6:4,8,10 6:13 35:2 paid 61:22 panel 7:7,14 21:1				

60:18 66:12,16 66:18 69:24 83:15 pleasure 22:18 point 18:2 44:3,5 58:17 68:24 70:13 71:5 points 58:12 69:1 policies 8:20 49:22 50:18 policy 7:23 28:12 42:6 43:6 portfolio 11:18 12:2,9,13,21 14:7 16:12,15 16:23 17:18 18:3,14 20:1 24:17,19 25:9 25:12 26:17 28:13,21 31:9 39:3,10,18 40:1 41:21 42:21 45:1 46:19 47:2 47:12 54:17 62:18,22 63:1 63:21 64:2,3,12 64:18 71:17 portfolios 17:4 portion 72:13 position 76:16 77:11 positive 13:9 22:8 29:1,8 49:21 71:20,23 possibly 40:10 posted 37:21 postponed 10:18 potential 63:19 78:22 potentially 27:1 28:23 35:14 power 3:8 33:1,20 Practical 60:23 66:14 70:3 practice 12:1 practices 2:13 13:4 28:2 67:18	prefer 39:15 58:20 prepare 21:2 60:22 prepared 7:14 23:22 preparing 65:2 presence 2:3 66:2 present 1:10 3:14 presently 31:11 32:12 38:18 presents 11:19 President 21:8 34:6 70:3 pretty 71:5 prevented 14:20 previous 44:4 previously 28:9 prices 3:15 52:9 56:13 pride 60:13 primary 11:1 principally 75:3 principles 64:7 prior 51:19 69:2 priorities 54:19 priority 36:5 privacy 63:6,12 private 10:1 privilege 45:19 probably 32:22 38:14 39:19 68:17 problem 30:16 37:17 38:21 41:17 70:21 problematic 28:11 problems 31:22 proceed 45:15 49:10 53:1 57:17 66:20 75:16 proceedings 86:5 process 17:14 18:5 25:5 28:8 44:10 62:21	processes 46:17 productive 44:18 55:6 products 81:12 professionals 4:1 profiles 12:14 profitability 26:6 program 2:7 7:23 13:18,20 14:16 15:11,19 46:13 46:19 47:3,8,12 58:22 59:23 62:6,10 67:21 68:2 programs 9:23,24 53:14,15,16 61:19,24 62:13 67:6,16 79:8 progress 9:11 promote 22:7 promoting 8:7 29:13 61:14 67:3 76:9 proper 74:3 properly 24:20 83:18 84:14 properties 23:12 23:14,20 24:17 78:5,6,15 property 2:7,10 11:17 23:24 24:21,21,23 27:7,8 78:12,18 property-specific 28:19 proposals 28:3 proposed 13:24 14:3,8 16:17 17:15 62:16 81:22 Protection 4:6 7:9 13:19 46:11 proud 22:11 proverbial 25:3 29:6 provide 2:24 3:19 4:15 13:23 14:4	15:13 18:8 19:2 21:16 26:4 29:22 38:19,20 42:23 60:5 63:20 64:10 81:20 provided 29:19 37:19 43:18 65:4 provider 42:8 providers 16:9 18:4,5 provides 8:1 12:5 55:18 69:9 providing 2:12 13:1 18:11 28:13 proving 11:22 provisions 64:19 public 2:8 3:6 9:23 17:10 26:11 28:20 37:11,17 44:8 44:12 51:5,16 64:23 66:17 68:22 75:1,1 82:14,16 86:13 publicly 28:22 34:1 37:21 74:2 publish 12:13 pull 34:7 purchasers 2:8 purpose 28:15 31:24 56:20 purse 29:10 pursuing 24:10 put 4:23 25:1 40:17 42:7 43:7 69:3 71:13 73:10 p.m 1:7 85:4	questions 13:13 13:16 19:4 30:2 30:3,9 48:18 52:19 57:12,15 61:12 65:14 67:15 quickly 64:17 Quinones-Sanc... 1:13 2:17 35:21 35:23 36:1,11 36:16,23 37:8 37:13,18,24 38:4,9 39:11 40:3,11,15,21 41:16 42:13,16 43:23 quite 37:1 quorum 82:8,18 quote 3:12 5:9 35:3
<hr/> R <hr/>				
R 86:1 raise 63:11 raised 19:11 69:17 range 51:8 rate 11:4 rated 25:8 37:10 rating 25:10,12 25:15,17 26:19 27:12 34:1 71:18 ratings 26:8 raw 71:8 read 2:20 reading 84:7,18 ready 22:6 59:20 65:11 77:24 real 9:5 23:3 24:4 38:6 58:3 69:1 73:24 77:18 78:17 reality 29:16 realize 52:5 69:19 really 17:24 39:4 40:1 44:14,18				

47:13 52:2 61:23 69:21 70:19 71:2,12 73:12,23 77:10 77:19 78:20 79:6,22,24 81:18 Realty 7:13 20:24 21:3 45:22 78:17 reason 57:4 68:1 rebates 61:23 receive 54:20 receiving 62:24 reckon 7:3 recognition 54:21 58:22 recognize 6:22 50:8 recognized 20:7 59:1,2 recognizes 83:2 83:24 recognizing 29:5 59:7 75:6 recommend 81:3 recommendation 60:15 84:5,16 84:24 record 7:17 31:7 36:14 45:8,15 49:9 52:24 66:19 70:1 83:10 recovery 64:22 recreation 12:3 Red 32:3 redid 78:6 reduce 9:13 15:5 15:12 19:1 55:16,21,22 68:5,6 70:22 76:10 reduced 3:22 8:16 reducing 14:11 reduction 11:6 77:3,5	reductions 62:14 redundant 28:6 referred 21:12 refers 36:22 reflect 83:10 regard 62:16 regarding 13:12 63:6 regardless 22:10 region 22:1,8 58:1 76:22 77:21 78:5,13,22 80:7 regional 11:11 16:9 53:16 76:2 76:9 region's 76:24 regulation 40:9 43:12 regulations 6:14 34:18 44:10 related 6:14 11:7 41:7 59:17,18 63:22 64:7 relationship 40:7 73:12 relationships 56:17 relative 12:24 23:12 24:23 28:16 relatively 46:14 46:20 47:6 release 63:7,24 released 9:18 reliability 14:11 remiss 3:23 4:12 22:15 renders 40:1 renovation 9:17 rent 11:15 69:3 rents 27:9 repair 10:18 repeat 79:11 repeating 51:20 repetitive 70:13 report 12:14 23:19 39:10	reported 84:4,15 reporter 86:21 reporting 3:1 8:2 9:7 17:14 18:15 18:18 44:7 represent 10:24 54:2 62:13 representatives 63:10 representing 49:7 reproduction 86:19 request 7:4 28:3 28:18 38:3,5 43:7,8,20 require 47:10 55:14 required 39:8,16 48:15 requirements 28:7 requires 46:18 47:3 reseated 35:24 residential 50:19 53:13 residents 56:14 resiliency 11:9 resilient 56:12 resolutions 63:15 resolve 40:17 resource 43:20 resourced 79:4 resources 16:8 22:10 51:11 respect 29:17 35:3 respective 23:13 respond 13:12 responding 28:2 response 30:5 responsibilities 46:5 responsible 8:10 46:12 65:2 75:4 restate 82:9 result 10:19 16:5	resulted 62:1 results 10:3 17:12 30:1 retailers 15:17 retaining 24:7 retrofit 77:20,24 78:6,23 80:6 81:17 retrofits 73:16 revealing 78:14 revenue 5:11 review 35:7 41:9 83:12 Reynolds 7:20 8:5 13:21 40:16 Reynolds-Brown 1:11 2:2 3:4 13:14 19:4 20:2 20:11,14,20 30:6 31:6 34:9 34:20 35:1,18 35:22 36:3,13 40:9 41:3,11 43:2,11,19,22 44:1,20 45:2,5 45:17 48:20,24 50:9 52:20 57:6 57:13 58:10 60:10 61:10 65:13 66:1,11 66:22 69:13 72:21,24 73:2,5 74:17 75:15,20 82:2 83:9,17 84:8,11 Rich 4:13 36:18 right 19:14 62:19 70:12 77:14,15 ripe 52:2 rise 3:16 52:9 rising 27:9 road 82:13 room 1:6 5:3 35:11 61:15 RPR 86:13 Rules 84:5,17 run 31:22 33:17	runoff 55:21 <hr/> S <hr/> safe 22:8 safer 50:4 safest 56:3 salute 75:2 San 8:22 67:12 sat 69:15 save 54:9,22 59:14,15 61:21 68:5 80:4 saved 14:23 saving 57:10 61:17 savings 2:14 3:23 12:8 52:3,3,6 77:1 81:23 saying 84:20 says 34:2 scale 9:2 24:22 31:21 53:13 Scarlet 27:5 28:10 32:3,23 68:23 72:2 scenario 10:20 scheduled 84:18 schools 15:16 score 12:23 19:24 25:8 26:19 27:1 27:20 32:15,24 42:4 47:23 48:7 48:12 71:19,21 72:1,5 73:14 scored 71:18 scores 12:15 27:24 45:1 47:22 72:13 73:19 scoring 38:2 Seattle 8:22 56:10 67:11 second 6:4 7:14 23:5 68:18 83:15,16 84:9 84:10 seconded 83:18
---	---	--	--	--

84:15	Sharp 49:4,11,11 49:15	62:6 75:8	square 6:2,3,7,7 12:12 21:17 46:1 57:20 71:10 77:22 78:7,8	stipulate 44:11
Secondly 63:17	shopping 74:3	smarter 52:13	12:12 21:17	stipulates 44:6
section 9:13	shops 53:18	software 16:16	46:1 57:20	stock 11:10 50:15 51:21 79:3
sector 11:5 20:10 28:16 29:9 49:3 54:10 56:15	short 3:19 4:18 24:3	solely 68:8	71:10 77:22	stop 53:18
sectors 5:17 31:11	show 45:8	solution 42:23	78:7,8	storm 55:21
security 14:11	shown 15:21 16:3 19:7 23:24	solutions 10:2 11:13 14:10,18 60:3,24 66:14 70:3	Stabenow 49:5 53:2,2,5	story 25:12 76:20
see 8:23 11:6 29:2 33:11 34:14 43:19 48:8	shows 48:14	somebody 34:3	stack 2:11	strategies 25:1 55:22 80:22 81:3,13
Seeing 84:22	side 44:16,17 59:18,19 65:5 82:11	soon 68:11 74:24	staff 4:15 61:7	strategy 29:8
seek 23:11 24:12	sides 4:4 85:2	sophisticated 12:16	stakeholders 20:16 51:17 61:8 63:14,18 67:23	streamline 17:13 18:5
seeking 24:8	significant 72:3 76:15	sorry 17:17 33:16 33:22 35:22 36:1	stand 52:7 71:16	Street 45:23 46:3 46:5
seeks 2:6	significantly 9:17	sort 36:21	standard 12:22 71:3	strengthen 49:24 56:7,16
seen 40:19 42:5 43:3 70:16 73:18	signify 84:20	sounds 41:13	standardized 16:14 64:11	strengths 23:23
seize 75:2	similar 4:21 10:21 12:4 13:1 32:10 43:6	space 19:23 21:18 26:10 32:20 33:5,10 46:1 71:10 74:3 78:19 79:1 80:16	standards 53:22	strive 22:12
send 74:23	similarly 54:24	spark 56:22	stands 22:6 59:20 75:12	strong 5:4 15:1 50:6 53:7
sense 8:24 10:1 49:22 56:19	simple 11:14 12:22 17:2 47:6 52:4 59:13	speak 19:10 35:15 63:4 74:20 75:19	Star 9:20 13:20 14:7,16,19 15:3 15:11,19 16:8 19:12 20:8 24:11 25:22 27:24 32:11 46:10,13,16 47:16 58:24 62:5 71:17,22 73:14,19,22	stronger 56:14
separate 29:19	single 16:22	speaker 62:17	15:11,19 16:8	struggling 27:8
series 12:22	sir 45:13 48:21 69:24	speakers 62:12	19:12 20:8	study 50:15 77:19
serve 14:2 53:18	simply 2:9 15:22 25:10,17 43:18	special 4:5	24:11 25:22	sub 80:15
service 18:4,8 42:10 43:16 64:24	single 16:22	specific 30:2 61:12	27:24 32:11	submitted 6:9 36:6 45:9
services 18:9 27:16 53:19	sitting 61:15	Spiegel 60:23 66:14 70:2,2 72:22 73:1,3,7	46:10,13,16	subparagraph 36:22
session 84:7,19	size 6:1,5 13:1 31:12 46:23 78:15	specifically 39:20 40:5 63:1	47:16 58:24	subsequent 85:1
set 23:14 51:12 54:18	sized 54:24	spend 33:7,8,9	62:5 71:17,22	Substantial 52:3
sets 8:12 9:13	sizes 15:14 30:17 78:4	spending 15:24 78:3	73:14,19,22	substantially 9:21
settled 63:9	skewed 41:19	Spiegel 60:23 66:14 70:2,2 72:22 73:1,3,7	start 7:6 57:9	success 9:8 20:6,9 76:20
setup 47:12	skyline 21:23	split 81:9,13 82:23	state 4:19,21 7:17 22:2 31:6 36:13 36:17 45:14 49:9 52:24 53:21 66:18,19 69:24	successful 4:17
seven 36:4,6,24	slow 10:15	sponsored 63:8 76:7	46:10,13,16	sufficient 67:20
shame 68:23 79:19	small 34:7	spur 78:24 79:10	47:16 58:24	suggest 63:13
shaming 26:24	smaller 47:10 55:14	spurred 47:24	62:5 71:17,22	suggestions 60:15
share 17:9,12 23:21 33:3 37:9 38:2 42:5	smart 10:1 61:19		73:14,19,22	suggests 28:24
shared 28:20			stands 22:6 59:20 75:12	superior 18:22
sharing 26:2 27:24 28:5,13 28:18			Star 9:20 13:20 14:7,16,19 15:3 15:11,19 16:8 19:12 20:8 24:11 25:22 27:24 32:11 46:10,13,16 47:16 58:24 62:5 71:17,22 73:14,19,22	supervision 86:21

supportive 23:8 34:24	Tasco 82:22 83:16	tested 18:18	58:18 65:17	Tom 61:6,9
supports 8:15 13:8 22:23 69:10 76:19	tax 27:23	testified 77:6	71:20,23 74:5 74:16	tons 14:20
sure 3:9 5:17 19:16 20:13,21 34:20 43:24 64:3,13,21 65:6 74:1,2	taxes 27:9	testify 7:24 13:11 14:2 21:14 48:18 53:4,7,9 57:12 65:9 66:15,24 70:5 75:22 82:1	things 23:16 27:18 32:8 37:5 40:6 58:14 69:3 69:8 73:14 77:16 79:20	tool 9:4 11:24 12:2,22 14:7 16:13,16,20 17:11,22 18:1 18:19 19:18,19 20:5 23:23 24:18 39:18,20 41:23 79:7
Surely 61:10	technical 23:7 29:17 35:4 36:9 38:22 50:23 83:11	testifying 45:19	think 31:23 32:6 38:24 39:6 44:17,22 58:12 60:3 61:13 65:4 71:6 74:15 75:5 79:7,13,19,21 80:5,24 81:6,14	tools 2:13 3:20 15:10,15 24:5 63:8 78:24
surprising 10:16	technicalities 40:6	testimony 2:5 3:6 7:4,17 14:5 20:22 23:4 29:19,22 30:8 30:21 31:2 34:22 35:2,5 41:7 44:4 45:9 45:15 48:21 49:10 51:19 52:21 53:1 57:14 58:15 60:11 66:20 69:23 74:18,21 75:16 77:17 82:4	third 6:8 23:6 64:19	top 6:10 29:5 37:2 78:12
surveyed 24:14	tell 25:11 33:8 65:20 75:11	thank 2:3 3:4,23 4:5,13 6:21 8:4 13:11,14,17,22 19:3,5 20:22 21:12 22:15 29:21 30:7,11 31:3,5 34:21,23 35:17,20 41:10 41:13 43:23 45:3,5,18 48:17 48:21,21,23 52:18,21 53:3 57:11,13,20 58:10 60:8,10 60:16 61:3 65:8 65:9,12,16,23 66:9,10,24 69:12,13,22 70:4 74:17 75:21 82:1,3 83:5 84:24 85:3	thought 28:9 59:23	total 10:24 12:12 26:19 39:21 54:2
suspect 24:15	tells 71:1 78:20	thanks 21:6	thoughtfulness 65:10	tough 7:2
suspended 84:6 84:17	template 43:7,18	thing 32:1 34:2,13	thousands 15:4	towers 21:21
sustain 68:3	templates 65:3		three 6:10,13 7:1 7:5 9:9 21:1 23:4 36:7 37:2 61:15 69:15 73:18 79:13	track 16:21 19:20 19:21 42:1
sustainability 5:19 7:11,19,24 8:6,9,12 13:7 19:9 22:3,20 26:6 35:15 66:5 67:9,11 75:5 76:17 77:9	Temple 70:8		thrilled 2:15	tracking 9:7 11:24 54:16,22
sustainable 28:1	Ten 21:3		throw 69:6	trained 53:21 70:10
system 31:14,15 31:16 63:21 64:17 72:7	tenant 27:1 28:3,6 33:5,6,15,15 38:13,16,18,23 39:13,24,24 40:1,7 43:8,18 46:7,23 48:5 72:4 80:17		throw 69:6	training 47:11 53:20
systems 25:18 32:18 55:11 58:4 64:4 72:7	tenants 2:7 13:5 17:9 24:7 25:6 25:24 26:3,9 27:11,19 29:10 32:19 33:3,12 33:16 38:2 47:15,17,20,21 51:23 54:14 55:5 56:17,23 59:11 69:4 79:2 81:14,22		tier 29:5	transaction 43:10 69:2
T	tenant/landlord 56:16		time 3:14 10:8 12:1 13:13 19:21 32:5 40:23 44:14,23 45:3,6 70:8 79:6	transcript 86:9,18
T 86:1,1	tend 23:16		timed 64:16	transfer 64:20 65:3
table 5:10,18 7:7 7:12 40:4 41:5 57:19 80:11	tens 15:4		timing 63:23 64:14	Transformation 4:8 60:21 66:13 66:22 67:2
tailor 67:21	Term 67:9		title 2:20	transparency 79:20
tailors 15:9	terms 3:3 37:9 54:11 78:22		today 2:15 4:8,17 4:22 5:23 14:1 21:9,14 22:17 29:22 50:5 53:6 58:8 61:6,15 62:12 70:5 75:22	transparent 68:19,20,21 69:21
take 17:3 40:23	Terrific 20:20		told 71:9	transportation 11:5
taken 5:16 86:7	Terry 50:17			trees 62:2
talk 20:18 73:3	test 25:2 70:24 71:1			tremendous 21:24
talked 59:16 64:12 70:14 72:17				tremendously
talking 36:3				
targets 9:11				

67:17 trend 8:19 9:19 trip 19:6 true 15:23 26:22 truly 26:2 Trust 7:13 20:24 78:18,18 try 68:17 70:13 75:17 trying 34:17,18 82:23 Tuesday 1:7 turn 27:22 29:15 twice 11:4 two 4:20 6:8 8:18 25:17 31:20 36:7,22 37:1 38:10 44:13 58:12 63:2 68:12 77:5 78:16 type 16:2,4 19:17 19:18,19 28:18 29:7 types 15:14 19:23 30:22 typically 3:22 33:6 54:8 72:10	unfamiliar 10:20 unfinished 66:7 unfortunately 10:5 unfunded 64:21 unintended 27:4 unique 10:10 76:7 United 4:6 7:9 University 70:8 unjustifiably 27:5 update 55:12 updates 47:6 64:18 upgraded 42:10 upgrades 10:18 33:9 48:4 upload 17:6 18:6 urge 52:15 57:7 usage 2:10 3:2 8:3 52:5 use 9:14 10:7,10 10:16 11:1,7,22 12:1,17,19 13:1 13:8 15:5,9 16:1 16:14,19 18:14 18:18,20 19:18 19:19 26:10 30:19 33:16 41:9,23 42:2 46:20 47:7,15 47:15 70:17 72:4 76:11 80:19 useless 39:5 40:2 users 16:21 25:24 uses 12:22 33:23 46:23 79:18 utilities 42:20 51:5,24 80:22 81:21 utility 9:24 12:23 13:3 14:24 16:9 16:24 18:4,11 38:18,21 39:7 39:16 42:8 44:16 47:1,8 64:23 67:10	80:18,20 81:2 utilizing 24:17 utmost 22:4 U.S 13:19	79:14 83:9 84:24 wanted 18:2 36:24 65:15 77:16 wants 34:6 62:16 Washington 4:21 43:5,17 wasn't 47:9 waste 15:12 54:5 57:3 wasted 11:12 22:11 52:1 water 2:9 3:1 8:2 16:21 53:15 54:16 55:17,20 55:21 way 9:12 16:15 18:15 19:15 28:4 29:13 30:17,23 32:24 33:2 35:7 40:13 42:22 43:12 68:19 80:15 81:15 ways 41:23 42:22 59:12,13 68:12 69:19 70:11 weather 10:12 56:12 website 37:23 week 66:2 weeks 77:5 welcome 4:9 7:15 13:16 21:5 35:19 36:14 41:4,12 45:14 48:18 49:1 52:21 57:12 61:1 82:3,10 we'll 20:23 40:3 42:17 we're 38:23 80:13 we've 9:9,10 48:10 61:20,22 wholeheartedly 72:19	wife 72:15 willing 65:11 willingness 33:1 37:9 win 30:1 winter 62:4 witness 7:7 60:22 74:22 75:11 woman 39:18 women 53:21 won 76:3 word 35:11 words 67:23 work 5:7,8 22:18 33:20 39:21 42:21 44:24 52:22 56:18 58:6 59:12 74:7 74:8 79:22 80:16 81:7 82:6 worked 15:4 44:9 53:8 61:16 workers 21:19 27:15 working 6:16 15:7 29:24 41:2 50:3 51:6 61:7 62:9 80:14 81:1 81:4,11 Works 9:24 worse 27:11 worth 46:24 wrestle 34:17 wrinkle 66:7 wrinkles 82:6 written 27:4 40:14 44:5 45:8 58:14 77:17 www.strehlowc... 86:24
<hr/> U <hr/>				<hr/> X <hr/>
ultimately 2:14 10:19 uncommon 25:20 underperforming 54:19 understand 6:22 19:14 23:11 24:22 25:2 30:14 44:23 62:23 71:4,16 understanding 9:1 12:20 15:23 28:15 70:17,20 79:18 understands 25:4 undertaken 76:15 undertook 78:1				<hr/> Y <hr/>
		<hr/> V <hr/>		Yard 76:2 yeah 31:3 36:8 40:11,13
		vacancy 27:9 Valley 22:21 49:3 50:22 57:18,23 value 11:10 14:5 79:12 valued 21:19 values 27:21 various 22:23 42:22 vary 25:19 vehicle 26:11,14 68:9 vehicles 14:23 68:20 verify 54:20 version 64:1 versus 30:19 33:21 34:18 Vice 7:21 13:21 VICE-CHAIR 1:11 virtually 21:20 33:9 Vision 29:4 vital 57:4 vitality 3:18 29:12 voluntarily 24:10 42:19 43:15 voluntary 28:4 42:14 vu 69:15		
		<hr/> W <hr/>		
		waiver 6:15 want 2:2,19 6:23 21:1 31:3 32:7,8 35:5,6,12 37:21 37:22 39:12 40:23 58:17 64:2,13,21 65:6 70:4,12 79:11		

year 4:3 6:19 12:15 17:20 20:8 29:7 44:6,7 46:9 62:5	140 50:1 15 9:11 17:3 31:10 38:24 39:1,1 53:9,17	300 78:7 350 76:23 360 24:12	
years 4:19,21 8:18 9:9 14:15 23:18 44:13 48:12 51:21 53:9 55:8 61:16 69:16,18 75:6	150 9:11 16,000 18:16 1601 46:4 1700 45:23 46:3 183 12:12 185 71:11 1992 14:16	<hr/> 4 <hr/> 4 33:17 40 17:19 53:24 54:5 400 1:6 58:6 41 14:23	
year's 46:24 York 4:24 8:22 18:16 42:7 56:10 67:8 81:5	<hr/> 2 <hr/> 2,070 17:16 2:04 1:7 20 14:15 73:19 76:11	<hr/> 5 <hr/> 5 1:7 33:17 50 18:7 68:24 50,000 6:3,7 51 21:17	
yu 36:21	<hr/> 20,000 77:22 2005 46:2,3 2006 10:7 2007 4:19 2008 4:23,24 46:9 48:1	<hr/> 6 <hr/> 6,000 17:21 60 11:2 600 11:18 65 25:15	
<hr/> \$ <hr/> \$130 76:4 \$153 61:21 \$20 21:19 \$6 71:9 \$618 78:2 \$67 61:22	2009 5:1 9:19 76:22 2010 10:8 17:23 46:3 50:17 2011 14:21 17:23 18:15 76:3 2012 1:7 44:8 2013 44:8 2014 5:2 2015 9:15 2020 62:10 76:12	<hr/> 7 <hr/> 7,000 78:6 75 32:12 54:5 61:17 71:20	
<hr/> 0 <hr/> 0 24:22	<hr/> 3 <hr/> 3 33:17 78:19 3A 40:13 3:30 85:4 30 17:22 51:21 55:8 77:3	<hr/> 8 <hr/> 80 24:15 25:16 78:5 800 58:1 86 50:17	
<hr/> 1 <hr/> 1 19:24 39:1 42:4 45:24 71:18 1,500 53:21 1.1 62:1 10 9:14 77:4 78:13 10,000 12:12 100 19:24 24:23 42:4 69:1 71:18 71:19 100,000 77:22 11 72:1,5 12 16:24 120428 1:15 2:6 3:7 8:1,14 22:22 25:23 28:8 50:6 53:7 58:9 83:4,7 83:13,14 84:1,4 84:14 13 10:6 11:2	<hr/> 3 <hr/> 20 14:15 73:19 76:11 20,000 77:22 2005 46:2,3 2006 10:7 2007 4:19 2008 4:23,24 46:9 48:1 2009 5:1 9:19 76:22 2010 10:8 17:23 46:3 50:17 2011 14:21 17:23 18:15 76:3 2012 1:7 44:8 2013 44:8 2014 5:2 2015 9:15 2020 62:10 76:12 210 14:20 71:2,5 23 14:24 23,000 78:3 25 78:12 25,000 6:2,7 270,000 17:17 29 78:9	<hr/> 9 <hr/> 9-3400 2:23 90 24:15 96,000 62:2	