The Real Estate Roundtable

UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
SUBCOMMITTEE ON ENERGY

HEARING ON PENDING ENERGY EFFICIENCY LEGISLATION INCLUDING S. 1191, THE BETTER BUILDINGS ACT ("TENANT STAR")

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STATEMENT OF
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ON BEHALF OF
THE REAL ESTATE ROUNDTABLE

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(I) INTRODUCTION

Chairman Franken, Ranking Member Risch, and Members of the Energy Subcommittee, thank you for the opportunity to testify at this hearing on pending energy efficiency legislation.

My name is Brad A. Molotsky, and I am the Executive Vice President, General Counsel and Secretary of Brandywine Realty Trust (http://www.brandywinerealty.com/.) My *curriculum vitae* is attached for your reference. I am currently Vice Chair of the Sustainability Policy Advisory Committee (SPAC) of The Real Estate Roundtable (www.rer.org), and appear before you on its behalf. The Roundtable represents the leadership of the nation's top privately owned and publicly held real estate ownership, development, lending and management firms, as well as the elected leaders of the major national real estate industry trade associations. Collectively, Roundtable members hold portfolios containing over 5 billion square feet of developed property valued at over $1 trillion; over 1.5 million apartment units; and in excess of 1.3 million hotel rooms. Participating Roundtable trade associations represent more than 1.5 million people involved in virtually every aspect of the real estate business. Gerard H. Sweeney, Brandywine's President and CEO, is one of The Roundtable's members.

Of the bills that the subcommittee is considering today, my statement will focus on and emphasize S. 1191, the "Better Buildings Act," introduced by Senators Michael Bennet (D-CO) and Kelly Ayotte (R-NH). Companion legislation has also been introduced in the House (H.R. 2126) by Representatives David McKinley (R-WV) and Peter Welch (D-VT).

As explained in more detail below, the Better Buildings Act will help drive commercial real estate markets across the nation to become more energy efficient through a voluntary, non-regulatory, non-financial, recognition-based program. This bill requires no appropriations, because it would build upon existing, highly successful partnership programs between the Environmental Protection Agency ("EPA"), the Department of Energy ("DOE"), and the private sector real estate community. S. 1191 has garnered widespread support from a diverse group of real estate and energy advocacy stakeholders, as evidenced by the letters to Senate and House energy committee leadership that are attached to this statement.

(II) BRANDYWINE REALTY TRUST AND ITS COMMITMENT TO A SUSTAINABLE REAL ESTATE PORTFOLIO

I would like to provide a bit of context as to my company and our commitment to owning and managing a high performance real estate portfolio. Brandywine Realty Trust (NYSE: BDN) is headquartered in Radnor, PA, and is one of the largest, full-service, integrated real estate companies in the nation. Organized as a real estate investment trust (REIT), Brandywine owns, leases and manages an urban, town center and suburban office portfolio of over 30 million square feet with properties in California, Delaware, Maryland, Metro DC, New Jersey, Pennsylvania, Texas, and Virginia.

An energy efficient real estate portfolio lowers utility bills and other operating costs. Minimizing energy use in our buildings is not simply good business for Brandywine and our tenants, but also responds to investors who increasingly demand more efficient and

environmentally-responsible performance. Sustainability and energy efficiency are thus among Brandywine's core values, consistent with an overall commitment to provide excellent office environments to our customers, our employees and our vendor service providers. As part of our management structure, we have established a Sustainability Advisory Group led by a coordinator who organized a "Green Team" that meets on a regular basis to develop and prioritize corporate-wide policies and practices, makes recommendations to the Senior Management Committee, and keeps sustainability initiatives at high levels of awareness in our company through employee education and discussion programs. The Green Team is responsible for providing periodic reports to Brandywine's management and for posting results on-line regarding progress in minimizing our company's environmental footprint – reflected in policies such as those that encourage energy conservation in our assets' heating, cooling and lighting systems; negotiations with tenants and utilities to realize higher and more efficient performance from our buildings and spaces; use of sustainability criteria in the purchase of supplies, equipment, and services; and waste reduction and recycling platforms to minimize disposables and packaging, and foster the reuse of equipment and supplies where feasible.

As a result of these and other efforts, Brandywine is proud to have been distinguished with several of the real estate industry's prominent awards that recognize leadership in sustainability including an EPA Energy Star Partner of the Year (2013); Honorable Mention for NAIOP Sustainable Development Award - 2012; Finalist for NAIOP Developer of the Year 2012 and 2013; Pinnacle Award Winner for our sustainable efforts; and NAREIT Leader in Light Silver Award winner (2011).

Brandywine's Voluntary Participation in the EPA ENERGY STAR Program and Tenant Engagement on Energy Efficiency

As S. 1191 draws heavily on the market acceptance of EPA's ENERGY STAR program for commercial buildings, it is worthwhile to discuss Brandywine's voluntary commitment to the program. In 2009, eight of the approximately 260 buildings in our real estate portfolio at that time were labeled as ENERGY STAR. Today, we have 97 ENERGY STAR-labeled buildings, representing over 14.5 million square feet of our owned portfolio as labeled by EPA (*i.e.*, receiving a "75" score or higher on the agency's rating scale). This represents over 50% of Brandywine's owned square footage, and over 75% of buildings where utility meters are in our name and where we can fully benchmark those assets ourselves. Monthly data from these meters is automatically fed into EPA's energy consumption benchmarking tool, Portfolio Manager; no human interaction is needed to direct this data or to return it to us with our ENERGY STAR scoring. The energy consumption data is then provided back to us on a per building basis, and shared every month with our Property Managers for over 205 assets that we presently own. This process reveals to us the "top performers" in our portfolio that strive for the ENERGY STAR label, and those that can improve their energy performance with positive impacts from equipment, behavioral changes, and/or increased education.

As a result of and in connection with Brandywine's voluntary involvement in the ENERGY STAR program and our use of the Portfolio Manager benchmarking tool, we have:

- Engaged a local company out of Richmond, VA to check 25 buildings in our Pennsylvania portfolio to confirm and fix metering configurations and assist in reducing consumption;

- Developed building-by-building energy plans in our Northern Virginia portfolio to review and reduce consumption;

- Automated our Richmond portfolio with Trane system controls that measure building energy consumption daily via pulse meters, and which send warning emails to our engineers when tolerance is out-of-kilter or if set points (start and stop times) are off by five percent;

- Retrofitted all parking lots serving our Richmond buildings with LED fixtures – which will save wattage and extend useful life ten-fold;

- Retrofitted lobby and elevator lights in selected buildings in the Philadelphia, PA central business district, thereby reducing consumption and extending useful life – and using all local workers.

- Participated in EPA's national "Battle of the Buildings" competition – a "biggest loser" program to recognize buildings that lower the most energy consumption over a 12-month period – where our participating assets have placed in the top 10-15 office buildings nationwide over the last two years.

Finally, while the energy measures I discussed above are steps Brandywine has taken that are within our control, the work we have started to better align tenants with our ENERGY STAR-related goals warrants a brief description. We have directly engaged with a tenant prospect and connected them with the team at NRDC's Center for Market Innovation, which is assisting them with an integrated design for their energy usage in a new leased space "fit-out." This high performance new tenant space design should save this tenant approximately $1.25 million dollars in utility costs over the leased term (*i.e.,* the savings are between $.85 to $1.00 per square foot in a 225,000 square foot leased space). With another set of tenants in the middle of their leases, we have agreed to a 50/50 split to share the costs of lighting upgrades. The payback on this effort was less than three years, which was inside the lease term – a great result for the tenants and for our building's performance. Also, we have met with various tenants to engage them in discussions about how they can better manage "plug loads" and lighting loads within their leased spaces via wireless devices (*e.g.*, Modlet and BERT).

In short, Brandywine's voluntary commitment to ENERGY STAR has had a profound impact across our real estate portfolio. Creating a brand of EPA recognition for tenants in our buildings – as the Bennet-Ayotte bill (S. 1191) would accomplish – will allow us to better engage on energy efficiency initiatives with our key customer base, and can help achieve an even higher level of energy performance in our assets.

(III) FAST FACTS ON ENERGY EFFICIENCY

As part of an "all of the above" energy policy, the Subcommittee is right to emphasize efficiency legislation. The following "fast facts"[1] from EPA, DOE's Energy Information Administration, and other sources confirm that the cheapest barrel of oil or the least expensive kilowatt of energy is the one that is *avoided*. Programs to encourage energy efficiency are the most effective and lowest-cost measures in moving our nation closer to energy independence, and spurring U.S. job growth in a globally competitive "new energy economy":

[1] http://www.energystar.gov/ia/business/challenge/learn_more/FastFacts.pdf.

- There are over 5 million commercial buildings and industrial facilities in the U.S., totaling about 70 billion square feet.
- The vast majority of commercial buildings standing today will be with us for decades and into the middle of this century. For example, in New York City, as much as 85% of commercial buildings that exist today will still be standing in 2030.[2]
- Commercial buildings account for approximately 20% of the nation's energy consumption, and as much as 80% of energy consumed in urban areas.
- The combined average annual energy costs for U.S. commercial buildings and industrial facilities is $202.3 billion.
- About $20 billion can be saved every year if the energy efficiency of commercial buildings and industrial facilities improves by 10%.
- The basic tools to retrofit buildings – like efficient furnaces, boilers, water heaters, and spray foam insulation – are manufactured here in the United States and not in China, Germany, or elsewhere overseas.[3] Construction workers on retrofit projects rely on local workforce resources where, obviously, buildings are located.
- Saving energy is cheaper than producing energy. Our country should pursue an "all of the above" energy policy, but it is important to recognize the cost of a kilowatt hour of energy saved is cheaper than the cost of an equivalent kilowatt hour of energy produced:

[TABLE FOLLOWS ON NEXT PAGE]

[2] PlaNYC, "Greater Greener Buildings Plan": http://www.nyc.gov/html/gbee/downloads/pdf/greener_greater_buildings_plan.pdf.

[3] http://green.blogs.nytimes.com/2010/03/12/made-in-the-u-s-a-efficiency-materials/.

Costs of Saving Energy vs. Producing Energy

Technology	Costs (per kilowatt hour)
Energy Efficiency	2-3 cents[4]
Wind	9 cents[5]
Geothermal	10 cents
Advanced Coal	11 cents
Advanced Nuclear	11 cents
Solar PV	21 cents
Offshore Wind	24 cents

- According to a report[6] released by the Building Owners and Managers Association (BOMA) International, the expenditures that sustain office building operations—management, maintenance, repairs, building services and utilities—generate significant, continuous and growing expenditures that support local businesses, create job demand, and contribute significantly to U.S. gross domestic product (GDP):

  ➢ For each dollar of office building expenditures, the U.S. economy gains $2.57. And for every one of those dollars, nearly 20 jobs not related to the building itself are supported.

  ➢ 79.7 billion in office building operating expenditures contributed $205.1 billion to GDP in 2011 – equivalent to the State of California's annual budget.

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[4] Costs of saved energy ("CSE") per kilowatt hour ("kWh") for energy efficiency programs range from 2 cents to 3 cents per kWh. See American Council for an Energy Efficient Economy, "Saving Energy Cost-Effectively: A National Review of the Cost of Energy Saved Through Utility-Sector Energy Efficiency Programs" (Sept. 1, 2009), available at http://www.aceee.org/research-report/u092.

[5] Costs for all power generation sources in table provided by U.S. Energy Information Administration, "Levelized Cost of New Generation Resources," Annual Energy Outlook 2011, available at http://www.eia.gov/oiaf/aeo/electricity_generation.html (provides "Total System Levelized Cost" for various "Plant Type(s)" in dollars per megawatt hour ("mWh")). For purposes of table conversion: mWh / 1000 = kWh.

[6] "Where America Goes to Work: The Contribution of Office Building Operations to the Economy" (2012), available at http://www.boma.org/industry-issues/state-local-issues/Documents/2011_BOMA_Econ_Impct_FINAL%20Proof%20for%20print.pdf.

- As a result of the $79.7 billion expenditures for office operations, 1.6 million *indirect* jobs were created across all sectors of the economy, about the same number employed by McDonald's worldwide. This is in addition to the estimated 2.2 million jobs *directly* related to the on-site management and operations of buildings.

With that foundation on the importance that Congress should place on energy efficiency policy, I appreciate this opportunity to draw the Subcommittee's attention specifically to "The Better Buildings Act" (S. 1191).

(IV) THE BETTER BUILDINGS ACT (S. 1191) (a.k.a., "TENANT STAR")

Congress should enact S. 1191, sponsored by Senators Michael Bennet (D-CO) and Kelly Ayotte (R-NH), at the earliest opportunity.

Owners and managers of large buildings report that tenants consume 50% or more of their structures' total energy.[7] Accordingly, choices made by office tenants in designing and operating within leased commercial spaces have a great impact on U.S. energy consumption. Although tenants and building occupants have an essential role to play within spaces they control to improve overall building efficiency, to date bills introduced by Congress have focused on how real estate owners and developers may lower energy consumption at the "whole-building" level. This is only part of the issue. Office tenants like data centers, law firms, banks, trading floors, restaurants, and retail stores use high amounts of energy – especially in our nation's growth centers.

In Brandywine's experience, voluntary education and recognition programs create motivation for building owners to engage with tenants who account for vast quantities of the energy consumed by commercial real estate. S. 1191 is an innovative step forward in federal energy efficiency policy, because it takes a holistic approach by considering office tenants' impact on energy consumption. It will synchronize commercial landlords and tenants toward a common goal of lowering energy use in built environments across our nation. Notably, the bill does not impose regulations or mandates on businesses. Rather, the Better Buildings Act relies on market-driven, non-regulatory, "best practices" and recognition incentives to align building owners and occupants to cooperatively reduce demands on the energy grid. And, it warrants emphasis that this bill does not require new federal spending or appropriations, because it fits within existing, proven, and already-funded public-private partnership programs at EPA and DOE.

The Better Buildings Act offers two mechanisms to prompt tenants and landlords to cooperate on energy efficiency. The first concerns "best practices" to encourage high-performance design and construction of new tenant "fit-outs" of spaces in buildings, prior to the point they are occupied pursuant to the terms of a commercial lease agreement. The second concerns valuable marketing recognition for leased spaces after they are occupied, by offering a "Tenant Star" label for building occupants that distinguish themselves through high efficiency operations in the spaces or floors they lease. The "Tenant Star" label will serve to incent positive end-user behavior, help companies attract and retain like-minded employees, and may satisfy increasing demands from the shareholder and pension fund communities that call for investments in environmentally responsible business concerns.

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[7] See http://www.nrdc.org/business/cgi/process.asp,

(1) *Best Practices to Encourage New High Performance Tenant "Fit-Outs"*

Commercial tenants are most likely to make structural investments in the building spaces they occupy at the time they enter into new leases, or renew leases. S. 1191 would encourage high-performance design and construction of leased spaces at the point of new "fit-outs" by authorizing DOE to study and learn from private sector "best practices" of how commercially leased spaces are constructed up-front to achieve high performance, implement cost effective measures with viable pay-back periods, and ultimately reduce utility costs for businesses. Based on DOE's study, it may then develop a voluntary program – with stakeholder comment – to reward and recognize tenants that design and construct high performance leased spaces.

DOE would be given the platform to draw heavily from the groundbreaking work by the Natural Resources Defense Council's Center for Market Innovation (CMI). In particular, CMI is spearheading a "High Performance Tenant Demonstration Project" in collaboration with industry leaders and technical advisors including Goldman Sachs, Johnson Controls, Jones Lang LaSalle, Malkin Holdings, SKANSKA, and Urban Land Institute(ULI)/Greenprint.

I strongly encourage the Subcommittee's members and staff to explore CMI's webpage[8] to gain a fuller appreciation for this project, which makes the business case for the design and construction of cutting edge and efficient tenant spaces. As CMI explains, the "High Performance Tenant Demonstration Project":

> [A]ims to promote the compounding effect of owner/tenant collaboration, as tenants who value high performance spaces choose to locate or remain in buildings with highly efficient central systems and transparent energy management practices. As a result, building owners investing in central system energy efficiency improvements will not only garner operating savings, but will also gain competitive advantage in attracting and retaining these high value tenants.
>
> CMI's Project team is modeling, quantifying, documenting, and publishing the energy savings generated by a series of high efficiency tenant build-outs, and the corresponding return on the tenants' respective incremental investments in the installed energy performance measures (EPMs). The Project case studies will also note the value placed by tenants on various other advantages to these build-outs, including furthering corporate social responsibility goals, and increasing employee attraction, retention, and productivity.

The CMI website contains a "how to" design guide, case studies, and describes a replicable "optimization process" for commercial landlords and tenants to consider how various energy performance measures can be packaged to reduce loads and manage occupant behavior in leased commercial spaces. CMI's work shows that its process – used in actual buildings (such as the Empire State Building) during the early stages of build-out and design of leased spaces – can provide 30 to 50 percent energy use savings compared to a standard code compliant space. The payback period for these measures is three to five years, ensuring that these projects "pencil out" and make for sound investment choices given the duration of commercial leases (generally around 10 years) in the nation's urban and suburban growth centers.

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[8] http://www.nrdc.org/business/cgi/.

The Bennet-Ayotte bill fills a market need in providing commercial landlords and tenants with information and "best practices" guidelines to select, design, build, and occupy spaces that will make a significant difference in energy usage and operations across the U.S. real estate sector.

(2) *Opportunities for Voluntary "Tenant Star" Recognition in Existing Leases*

In addition, once tenants move into their leased spaces, they should be able to gain recognition for energy efficient behaviors as a marketing tool to advertise to their own customers, investors, and other audiences. S. 1191 furthers this objective by authorizing EPA and DOE to develop a new program for a voluntary "Tenant Star" label. Such a program would build upon the widely successful ENERGY STAR label that is already available for real estate owners at the whole-building level.

The ENERGY STAR label for buildings has been available since 1999. Its growth, popularity – and impact – are well-documented.[9] Across the U.S., owners strive to voluntarily distinguish their buildings as ENERGY STAR rated, to attract tenants and satisfy investor demands. The Better Buildings Act brings this market-based program to the next level – with a tenant-oriented certification for leased spaces. Today's ENERGY STAR is based on whole-building recognition for "top of the class" energy performers. The Bennet-Ayotte bill correctly tackles energy efficiency as an issue that the commercial real estate sector must advance from both the "top-down" and "bottom-up." It would enable "Tenant Star" certified spaces within "ENERY STAR" whole-buildings and thereby transform – in a non-regulatory way – how building owners and their tenants think about energy efficiency.

Just as ENERGY STAR has dramatically improved how real estate owners, utilities, governments, and businesses interact to improve energy efficiency in buildings and lower energy costs, "Tenant Star" has vast potential to do the same. Please consider the following:

- ENERGY STAR buildings are located in all 50 states. Any member of Congress can find where these buildings are located in their states or districts with EPA's easy-to-use on-line locator tool.[10]

- Attached at the end of this statement are fact sheets[11] that EPA makes available on its website. They show the geographic range of cities and real estate markets from coast-to-coast that boast the most ENERGY STAR labeled buildings.

- EPA's facts sheets also explain that:

  - As of December 2012, more than 20,000 ENERGY STAR certified buildings across America helped save more than $2.7 billion in annual utility bills.

  - The cumulative number of ENERGY STAR certified buildings increased by more than 24 percent from 2011 to 2012, representing more than 3 billion square feet of floorspace nationwide. In 2012 alone, more than 8,200

[9] See "Celebrating a Decade of ENERGY STAR Buildings," available at: http://www.energystar.gov/index.cfm?c=business.bus_ES_bldgs.

[10] http://www.energystar.gov/index.cfm?fuseaction=labeled_buildings.locator.

[11] See "Data Trends" series: http://www.energystar.gov/index.cfm?c=business.bus_energy_star_snapshot.

buildings earned EPA's ENERGY STAR certification. The program is thus experiencing great growth.

- ENERGY STAR certified whole-buildings use an average of 35 percent less energy and emit 35 percent fewer greenhouse gas emissions than typical buildings.

- As of December 2011 – on a voluntary basis – organizations have used the ENERGY STAR benchmarking tool known as "Portfolio Manager," to track and manage the energy use of over 260,000 buildings across all 50 states, representing nearly 28.2 billion square feet – that is, nearly 40% penetration of the commercial real estate market.

- ENERGY STAR certification is good business for commercial building owners. Studies show that ENERGY STAR labeled buildings may command higher rents, have less volatile occupancy rates, and can command higher selling prices than otherwise similar conventional buildings.

With these metrics for success at the whole-building level, the Better Buildings Act sets the stage for further innovation through voluntary recognition for commercial office tenants that may cooperate with their landlords to earn the "Tenant Star." The Bennet-Ayotte bill would help to further unleash the economic and environmental power of the ENERGY STAR brand, through the innovative next step of allowing tenants to join their landlords in striving for – and reaching – higher levels of energy performance, and giving them the tools they need to understand how much energy is consumed by the devices and equipment they control within their leased spaces.

Thank you again for this opportunity to testify on behalf of The Real Estate Roundtable on the important topic of energy efficiency, and S. 1191 in particular. I look forward to answering the Committee's questions.