

An occasional series of working papers prepared by the DowntownDC Business Improvement District to foster dialogue about critical issues relating to Downtown Washington's economic, social and physical development.

DowntownDC ecoDistrict: A 21st Century Sustainability Framework



OVERVIEW

Building on best practices taken from the DowntownDC Business Improvement District's (BID) July 2008 *Greening Downtown DC* leadership paper and its 2010 EcoDistrict Summit, the DowntownDC BID launched the DowntownDC ecoDistrict in April 2011. In so doing, the BID is making a commitment to organize major property owners within its area to take collective action to reduce the BID area's carbon footprint and consumption of resources and, at the same time, increase market share and profitability.

An EcoDistrict is "a neighborhood or district with a broad commitment to accelerate neighborhood-scale sustainability. EcoDistricts commit to achieving ambitious sustainability performance goals, guiding district investments and community action, and tracking the results over time," according to the Portland Sustainability Institute (www.pdxinstitute.org).

The DowntownDC ecoDistrict will encompass the entire DowntownDC BID area—comprising 68 million square feet (SF) of office space, more than a dozen major civic and cultural institutions and some 6,000 residences. This geography represents a significant market for energy and water consumption, solid waste generation and transportation needs.

Since its inception in 1997, the DowntownDC BID has worked collaboratively to develop strong working relationships with a wide range of community stakeholders on issues such as expanding public transportation, removing waste and grafitti and maintaining tree canopy and green spaces. In 2005, the DowntownDC BID convened the city's seven other BIDs and its only community improvement district (CID) to create the DC BID Council as a mechanism to improve the efficiency of BIDs across common areas of interest. In addition, the DowntownDC BID is actively discussing and planning with local, federal, public and private sector experts on sustainable practices.

The DowntownDC BID is now poised to leverage these existing relationships to organize and actively engage property owners and managers, public-sector officials,



PHOTO BY KEVIN KOSKI

At the September 30, 2010 Downtown EcoDistrict Summit, Richard Bradley explains the benefits and urgency of having the private sector reverse practices that increase greenhouse gas production.

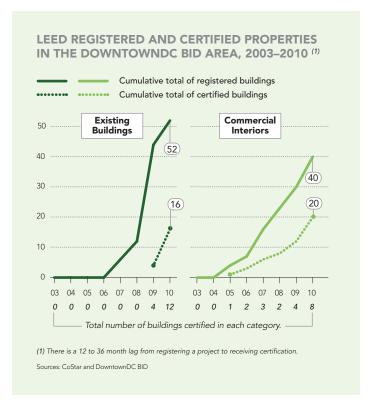
ECODISTRICT SUMMIT

The DowntownDC ecoDistrict's creation was inspired by the 2010 Downtown EcoDistrict Summit co-hosted by the DowntownDC BID and the Urban Land Institute. More than 50 property owners and developers, federal and local officials, financial experts, planners, architects, and lenders came together on September 30, 2010, at the Renaissance Washington, DC Hotel to move sustainability initiatives from talk to action. The conclave envisioned a sustainable future for the BID and focused on how to get there exploring cooperative approaches and financing options.

Eleven speakers explored various aspects of a proposed DowntownDC ecoDistrict which would bring green practices to an integrated geographic area, involve cooperative approaches to achieve efficiencies, lower costs, reduce carbon emissions, and make Downtown a more environmentally sustainable place. The summit clearly identified the need now for the bold thinking and comprehensive approaches similar to those embodied in Arlington County's Climate Action Plan and anticipated the long-term sustainability infrastructure and investment needs required to maintain DC's position as the hub of the regional economy.

There was widespread agreement that the ability to create a rapidly scalable market of high performance buildings hinges on collaborating to identify new methods of financing investments required to retrofit buildings. The challenge is quantifying the full value of investments when potential yields are not only in interest payments to the lenders-whether bondholders or financial institutions—but also to the property owners and tenants in the form of lower annual operating costs and higher quality healthier work spaces.

non-profit environmental and real estate organizations, and service providers to collect, analyze and share information and best practices that may result in wiser sustainability-related investment decisions.



The increases in LEED for Existing Buildings: Operations and Maintenance and Commercial Interiors registrations are an indication that the long term market opportunities are with existing buildings, according to a Pikes Research study. The potential market for major green renovations is estimated at \$400 billion nationally.

In 2008, the DC Office of Planning released the Center City Action Agenda, which seeks to "maintain the city's regional and global economic vigor and its positive impact on the local workforce in a way that is appealing, healthful, green and sustainable." The DowntownDC BID is refining its focus to achieve this and other city government goals and mandates.

Establishing the ecoDistrict represents the DowntownDC BID's commitment to support achieving the challenges outlined in the draft DC Climate Action Plan (CAP), released in September 2010 by the District Department of the Environment (DDOE). CAP identifies specific and collective actions residents, businesses, and institutions can take to reduce greenhouse gas (GHG) emissions and energy consumption.

DowntownDC BID property owners have demonstrated their leadership in the realm of sustainability. Washington, DC, is currently at the top of per capita achievements in a number of sustainability indicators, including Energy Star labeled properties, Leadership in Energy and Environmental Design (LEED) certifications, green power purchasing, and green roof installations.

Billions of dollars will be invested in developing high performance buildings and green infrastructure nationally over the next several years. The DowntownDC ecoDistrict can help ensure that the unique assets in the core of the nation's capital are leveraged to create a highly attractive investment environment.

GOALS

The DowntownDC ecoDistrict has three major goals:

- To reduce significantly peak and overall energy consumption in the DowntownDC BID area.
- To enhance the economic performance, market positioning and market share of Downtown buildings.
- To promote and develop DowntownDC as one of the most sustainable Downtowns in the nation and the world.

INITIATIVES

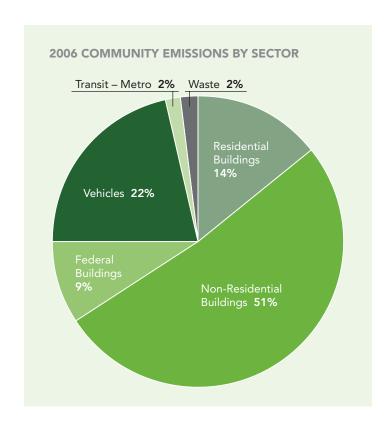
The number and scope of potential sustainability-related projects and programs that the DowntownDC BID might pursue is ambitious. The DowntownDC BID has been analyzing, researching and monitoring financial and

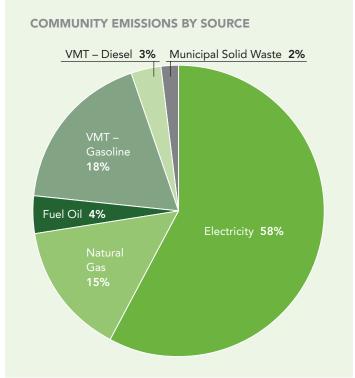
technological advancements in sustainable practices over the years. The BID is now proposing the first phase of the DowntownDC ecoDistrict, comprised of four initiatives:

■ **Research and innovation:** To collect and analyze a wide range of relevant sustainability-related data.

The DowntownDC BID collects information on a limited number of sustainability measures, including Energy Star ratings, LEED certifications and green roofs. We also have developed familiarity with public- and nonprofit-sector programs and private-sector initiatives and monitor legislation and regulations promoting sustainability within properties.

- Clearinghouse. We will grow into being the prime source of information for Downtown stakeholders who are interested in learning more about sustainable policies and practices.
- **Expanded indicators.** We will expand greatly the number of sustainability indicators of which we keep track.
- Global comparisons. We will use accepted industry tools and techniques to compare our performance to global Downtowns.
- Marketing and communication: To develop tools to facilitate communication about sustainability between





Commercial buildings are the city's largest producers of greenhouse gas emissions, due primarily to electricity use.

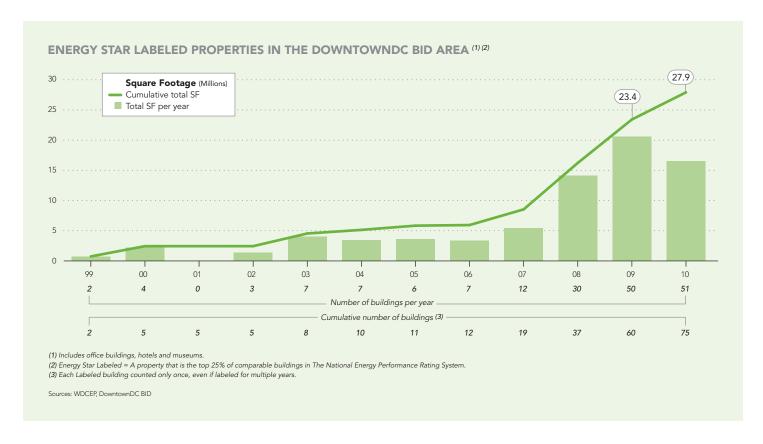
and among property owners and managers, tenants, public-sector officials and non-profit environmental organizations.

- Property manager network. In our first phase, we are identifying owners and managers of all BID-area properties greater than 100,000 SF and urging that a property manager network be formed. The DowntownDC BID will encourage this network of property managers to share and exchange best practices and industry information through working groups, social media and regular updates.
- Working groups. We will implement action-oriented working groups to involve a wide spectrum of downtown stakeholders from the vast array of organizations that own and occupy downtown offices, such as national associations, major corporations, embassies, monetary institutions, law firms and lobbyists, and everyone else who does business in DC.
- Web content. We are developing web content with a dedicated webpage linking to local, regional and federal resources as well as explanations of the DowntownDC ecoDistrict and its partners.
- Social media. The DowntownDC BID is staged to follow and redistribute information from sustainable

- experts using its ever growing following at Twitter.com/downtowndcbid. In addition, the DowntownDC BID will post blogs inviting feedback and discussions from stakeholders.
- Logo and branding. The DowntownDC BID is launching the EcoDistrict with a brand new logo identifying the DowntownDC BID area as an official ecoDistrict within the District of Columbia in order to brand the area and remind stakeholders, visitors, business owners and residents that the BID supports green and sustainable policies and practices.



■ Benchmarking and tracking: To improve sustainability practices in Downtown buildings by comprehensively measuring resource use (e.g., energy consumption), comparing like buildings, benchmarking and challenging properties to constantly improve.



Recent data demonstrates that more than 50+ buildings in DowntownDC are certifying their scores annually. This trend reflects best practices and GSA requirements that all new leases are in buildings that have earned the Energy Star label in the past year.

The DowntownDC BID area's properties are controlled by some of the most progressive property owners and managers in the world. Many collect detailed energy-use and other data for their individual properties, using various measurement methodologies and information technologies.

- *Survey.* We will survey all properties greater than 100,000 SF and determine individual methodologies and information technologies.
- *Information sharing.* We will encourage sharing non-proprietary information and incorporating benchmarks.
- Real-time tracking. We will explore the ability to track real-time aggregate and individual energy and other resource usage.

I recognized that information was, in many respects, like a public good, and it was this insight that made it clear to me that it was unlikely that the private market would provide efficient resource allocations whenever information was endogenous.

JOSEPH E. STIGLITZ, 2001 NOBEL LAUREATE IN ECONOMICS

■ Organizing cooperative action: To organize the DowntownDC BID area as a resource marketplace, encouraging cooperative action among property owners and managers and tenants.

Over the past 14 years, the DowntownDC BID has been successful at encouraging cooperative action among Downtown property owners and managers in areas such as operations, public space management, transportation and economic development. The DowntownDC BID now will add a sustainability focus in the following actions:

- *Tenant practices.* We will partner with property managers to promote sustainable practices by office, retail and residential tenants.
- Capital improvements. We will explore programs with property owners that offer cost-effective means to finance and implement energy-saving capital improvements.
- Energy procurement and demand management. We will continue to explore opportunities for intelligent energy procurement (e.g., to leverage existing steam infrastructure of the US General Services Administration (GSA); smart meter investment; intelligent building systems; and the potential of combined heat and power applications to offset peak demand and resource availability issues on a district-wide scale).

DC'S SUSTAINABILITY FOUNDATION

Over the past four years, the DC government has passed progressive legislation that creates the critical building blocks required to continue transforming DowntownDC into a sustainability model for the nation. These building blocks include:

- The Green Building Act of 2006. Requires that all DC public buildings meet the US Green Building Council's (USGBC) LEED certification standards. New private construction must meet LEED standards by 2012, making DC the first large American city to require the LEED green-building rating for both public and private projects.
- The DC Clean and Affordable Energy Act of 2008. Established the Sustainable Energy Trust Fund (SETF) and Energy Assistance Trust Fund (EATF) programs. Both are funded by a new utility assessment now totaling \$7 million annually and \$25 million by 2014. The Act also authorized creating a Sustainable Energy Utility (SEU) which will conduct sustainable energy programs; spur increased private spending in the economy by establishing benchmarking requirements for both public and private buildings; increase the solar energy requirement for electrical providers; and allow energy submetering for commercial tenants.
- The Energy Efficiency Finance Act of 2010. Established financing to retrofit existing buildings through municipal bonds of up to \$250 million. Proceeds will be used to install more energy-efficient air conditioning and heating systems, replace windows, install meters that automatically turn lights and equipment off, and make other improvements.
- The Potomac Electric Power Company (Pepco). Received a \$44.6 million grant to install smart meters in DC (approximately half of the total cost to install the meters citywide). The meters provide the infrastructure necessary for consumers to see the cost of energy in real time, allow for implementing real time demand management practices and open the possibility to dynamic pricing models that can reduce peak usage.



PHOTO BY KEVIN KOSK

DowntownDC BID executive director Richard Bradley (far left) and representatives from Pepsico inspect the first of 363 recycling machines recently installed throughout the BID in 2011.

Creating Climate Wealth. An early example of the benefits associated with cooperative action in the eco-District is the May 2011 High Performance Building workshop. The DowntownDC BID and the Carbon War Room are co-hosting a day of presentations on energy efficiency finance and technology solutions in conjunction with the 2011 Creating Climate Wealth Summit. Throughout the day, companies will present innovative technologies and financial solutions to Downtown building owners, government officials and financiers.

ACCEPTING THE CHALLENGE

The burgeoning number of legislative mandates, green programs, innovative technologies and competing services available to the commercial sector can overwhelm the market's capacity to adapt and innovate. To facilitate market growth and investment the DowntownDC BID

has partnered with DDOE, Environmental Protection Agency (EPA) and other agencies and organizations to identify market-based pathways toward sustainability for Downtown properties.

Partnerships and challenges underway or in development include:

- DC Climate Action Plan. DDOE challenges the private sector to reduce by more than 50% GHG emissions produced from commercial buildings. CAP provides a roadmap of collective actions that, when implemented, can reduce emissions and avoid costs.
- Green Building and Business Challenge (GB2). Piloted in the DowntownDC BID area in partnership with DDOE, GB2 will benchmark the current sustainability status of individual buildings and businesses to identify their specific needs and opportunities, as well as identify market gaps.
- Green Power Challenge. On March 17, 2011, the DowntownDC BID accepted Mayor Vincent Gray's challenge to become one of 71 EPA Green Power Partner organizations committed to purchasing wind power. In addition to serving as an example by recently purchasing green power for its Downtown Safety/Hospitality and Maintenance (SAM) team headquarters, the DowntownDC BID will generate interest among Downtown businesses and buildings to purchase green power. We talk the talk and walk the walk.

In addition, we will consider other partnerships and challenges in the ecoDistrict:

- District-wide issue-area challenges. These challenges call for property owners and managers to address issues such as benchmarking energy resource usage, creating less waste, and managing the transportation demands of employees.
- Sector-based challenges. In these challenges, the DowntownDC BID will work collaboratively with associations and membership organizations such as the DC BID Council and the Apartment and Office Building Association (AOBA) to coordinate customized outreach and education, including recognition of best practices.

INTEGRATING EXISTING DOWNTOWNDC BID PROGRAMS

In addition to enhancing focus on building resource management, the ecoDistrict will integrate the work the DowntownDC BID has underway in three critical areas that support sustainability:

- Public spaces. The DowntownDC BID will continue its 14-year effort, led by its team of Downtown SAMs, to help make DowntownDC a "remarkable urban experience" by encouraging a public realm that is environmentally sustainable. Current programs in this area include:
- Launching a district-wide public recycling program which will divert tons of recyclables from landfills annually.
- Conducting annual inventories of Downtown tree and park health to ensure proper care and tree replacement needs are identified.
- Improving Chinatown Park and New York Avenue medians by incorporating low impact development approaches.
- Transportation. The DowntownDC BID will increase awareness and use of Downtown DC's multi-modal transportation system for work, shopping and entertainment trips. Goals to achieve within two years include:
- Reducing travel times for all modes of transportation using an integrated approach to congestion management that involves the District Department of Transportation (DDOT) and private-sector business interests.
- Integrating electric vehicles (EV) into fleets and their infrastructure into buildings and the public realm.
- Encouraging more bike usage by marketing partnerships and programs such as goDCgo.com and Bike-Brand Your Biz.
- Assuring available metered parking in the BID area's core using enhanced technology and management strategies.
- **Green jobs.** The DowntownDC BID will identify which market sectors represent economic growth and job opportunities and what resources and partners can assist in developing this potential.

SUSTAINABILITY ACTIVITY TO DATE

The DowntownDC ecoDistrict will take advantage of the city and region's substantially high level of sustainability activity to achieve its ambitious goals. Some examples of this activity include:

- The GSA, DC's largest property owner, has invested \$398 million in energy-efficiency retrofits in its DowntownDC BID area owned properties and mandates green requirements and preferences in space that it leases in private buildings.
- DC led the nation with 25 SF of LEED certified space per person in 2010, according to the USGBC. By comparison, Nevada was the lead state with 10.92 SF per person.

Federal government investment, the local government's progressive sustainability legislation and private-sector green building activity already make Downtown DC a leader nationally. When it comes to alternative energy sources, our challenge now is to encourage other Downtown businesses to follow our lead and that of other BID-based establishments to tap into renewable energy sources.

RICHARD H. BRADLEY, EXECUTIVE DIRECTOR, DOWNTOWNDC BID

- The EPA reports the highest per capita rate of Energy Star labeled properties in the country; the BID area has 75.
- The EPA recently announced that DC is the nation's leading EPA Green Power Community, with more than 8% of its energy coming from green power purchases as of March 2010; the DC Government purchases roughly one-third of that total.
- DC has nearly 1 million square feet of green roof installations, with a strong pipeline of additional projects.
- Washington, DC's multi-modal transportation system has enabled the city to grow its residents by 15,862 and reduce the number of motor vehicle registrations by 15,000 during the 2005–2009 period.



PHOTO BY KEVIN KOSKI

The DowntownDC BID Safety/Hospitality and Maintenance (SAM) crews are committed to recycling, reducing and reusing. Here they gather for a briefing on the new recycling initiative in Downtown DC.

CONCLUSION

Downtown DC has undergone a significant revitalization in the last decade in which crime, vacancies, and empty lots have declined, making the area a more desirable place to live and work. However, to realize the goal of a sustainable, interconnected, energy-efficient neighborhood of office buildings, entertainment and retail venues and living spaces, creating a DowntownDC ecoDistrict is needed.

This DowntownDC BID-led structure for coordination and cooperation could help accelerate achieving the city and the nation's goals. Declaring the DowntownDC BID area an ecoDistrict will engage more stakeholders, provide better measurements of success and boost marketing efforts.

Making Washington a more sustainable city also will make it a model for other metropolitan hubs as it embodies best practices worthy of emulation and as it protects the planet, people and profit.

What could be better than improving sustainability through operational practices and supporting the city's efforts? Job growth and continued improvement in economic development are just some of the benefits to be realized with the DowntownDC ecoDistrict. It makes perfect business and 'green' sense.

RICHARD H. BRADLEY, EXECUTIVE DIRECTOR, DOWNTOWNDC BID

SUSTAINABILITY WEB RESOURCES

DC Department of Public Works – www.dpw.dc.gov
DC Office of Planning – www.planning.dc.gov
District Department of the Environment – www.ddoe.dc.gov
District Department of Transportation – www.ddot.dc.gov
District Government – Green DC – www.green.dc.gov
DowntownDC BID – www.downtowndc.org/green
EPA Energy Star – www.energystar.gov
Portland Sustainability Institute – www.pdxinstitute.org
Urban Land Institute – www.uli.org
US Green Building Council – www.usgbc.org

For additional information about the DowntownDC ecoDistrict please contact:

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The DowntownDC Business Improvement District (BID) is a private non-profit organization that provides capital improvements, resources and research to help diversify the economy and enhance the Downtown experience for all. This special district, where property owners have agreed to tax themselves to fund services, encompasses a 138-block area of approximately 825 properties from Massachusetts Avenue on the north to Constitution Avenue on the south, and from Louisiana Avenue on the east to 16th Street on the west. As a catalyst, facilitator and thought leader, the DowntownDC BID promotes public/private partnerships to create a remarkable urban environment. For more information, visit www.DowntownDC.org.





