

★ ★ ★
CLEAN
ENERGY

|||
DC

2022 PROGRESS REPORT



“Our city didn’t lose
a step in becoming
a clean energy leader...
The District ranks
number three on
the 2021 City Clean
Energy Scorecard.”

—MAYOR BOWSER





LETTER FROM MAYOR MURIEL BOWSER



During the period covered by this report—mid-2020 through the end of 2021—my administration was helping District residents and businesses navigate through a global pandemic, making sure they were safe and healthy, and that our city continued to function.

At the same time, we were increasingly seeing the results of climate change, but the District's commitment to clean energy did not waiver. In fact, I'm proud to say that many programs proved critical to supporting our community and were even expanded to serve more residents and businesses.

We still delivered services to low- and middle-income residents to help lower their energy bills. This included providing \$24 million in utility bill assistance, helping to weatherize 121 homes and adding 2,800 new subscribers to Department of Energy and Environment's (DOEE's) Solar for All program.

We expanded our efforts to provide our residents with more sustainable transportation options. Just one example is almost 11 miles of new bike lanes in 2021—which includes 7.4 miles of protected lanes—thanks to the District Department of Transportation (DDOT).

We gave more residents a fair shot thanks to green job opportunities. Through the DC Sustainable Energy Utility (DCSEU), the Train Green Program trained 217 individuals and conducted 20 job training courses. It also created 88 full-time green jobs for District residents. Separately, DOEE expanded its Solar Works job training program.

Thanks to these efforts and more, our city didn't lose a step in being a clean energy leader. In fact, we gained some. The District ranks number three on the 2021 City Clean Energy Scorecard, a jump of two spots since 2019.

We made momentous strides in the clean energy transition, even during a challenging time. Now that DC Is Open my administration is committed not only to supporting our residents and business during their recovery, but to advancing our clean energy goals, reducing our greenhouse gas emissions, and building a robust green economy. All of these steps will make our communities safer, healthier and more resilient.

Sincerely,

Muriel Bowser
Mayor, Washington, DC



EQUITY

The District aims to implement the Clean Energy DC Plan through an equitable lens to advance racial equity while also creating opportunities for historically marginalized residents to have access to reliable, affordable, and clean energy. The District expanded and rolled out new programs to support this objective.

The Mayor established the new **Office of Racial Equity** in February 2021 and DOEE released an **Equity Framework** to guide the agency's work and investments.



The Utility Affordability Administration utilized new federal funding to **fully-weatherize 121** homes and provide **emergency mechanical repairs** to **nearly 400 low-income households**.

In November 2021, DOEE released the **Racial Equity Impact Assessment** (REIA) Process Guide and Tool, which examines how different racial and ethnic groups will be affected by a proposed action or decision. DOEE piloted the REIA and is refining its use by the agency.



The **Solar for All Program** built new community solar projects **serving more than 1,850 low-to-moderate income households**.



The built environment—including residential, commercial, industrial, institutional, and governmental buildings—account for around three-quarters of the District's greenhouse gas emissions. To meet our clean energy goals, the District has committed to fostering cleaner, healthier, and more efficient buildings.

The District launched the **Affordable Housing Retrofit Accelerator** to ensure that low-to-moderate income households have access to the health, comfort, and financial benefits of energy efficient housing. The Accelerator will provide energy audits, one-on-one technical assistance, and direct financial assistance to approximately **140 large affordable housing** properties.



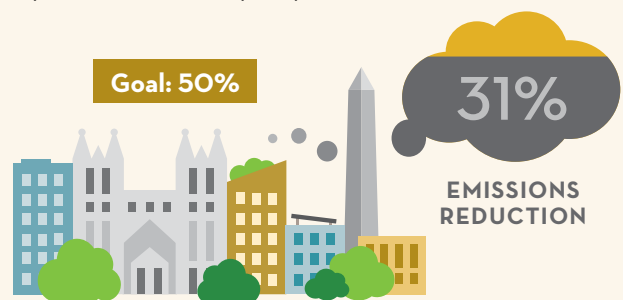
In fall 2021, DC Public Schools opened its first two **net-zero energy buildings**: **John Lewis Elementary School** and **Banneker High School**.

The DC Sustainable Energy Utility (DCSEU) successfully completed the **Low-Income Decarbonization Pilot** program, which incorporated rooftop solar and involved the replacement of natural gas or oil systems with electric systems in each home.

The **DC Green Bank** provided \$2.6 million in financing for three projects, leveraging significantly more private sector capital.

As of 2021, the DC Property Assessed Clean Energy (DC PACE) program generated nearly **\$57 million in economic savings** to property owners through lower utility bills.

The nation's first **Building Energy Performance Standards** program was developed through an intensive multi-sector process and is currently being implemented, with the program aiming to reduce energy use at energy-intensive buildings by 20% over the six-year period.



As of 2019, the District has **cut its citywide carbon footprint 31 percent** since 2006. Source: Department of Energy and Environment



BUILT ENVIRONMENT



ENERGY

The District is working to decarbonize its energy supply by deploying local solar, providing information and resources for our residents to transition to clean energy, and collaborating with local partners to modernize the grid.



As of April 2021, the District added **2,577 new renewable systems** certified for the Renewable Portfolio Standard (RPS) bringing the total to 11,700.

DC energy suppliers purchased over **20% of the city's electricity needs from renewable sources** to comply with the Renewable Portfolio Standard.

As of December 2021, Solar for All is serving **6,759 beneficiaries** via **25 megawatts** of solar capacity.

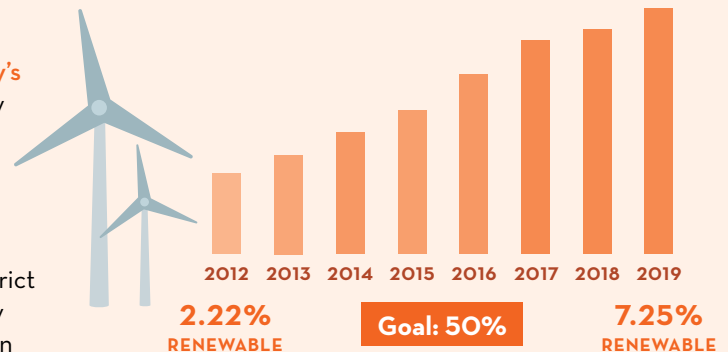


Electricity and natural gas use in the District dropped in 2020 by just over 10%, mainly as a result of pandemic-related changes in behavior and travel.



The Oxon Run community solar installation, the District's largest community solar project, was completed in FY 2021 and began delivering benefits to more than **785 income qualified households**.

Solar Works DC, the District's solar installation job training program, continued to grow the city's clean energy workforce, graduating its **288th resident in 2021** since the program began in 2017.



7.25 percent of annual power is from renewable sources. This includes all fuels for buildings and transportation, including electricity and fossil fuels. Source: Department of Energy and Environment

The District seeks to catalyze a shift away from fossil fuel-burning vehicles to pollution-free zero-emission vehicles, and took several steps in FY2021 to meet this long-term goal. Additionally, following the initiatives outlined in moveDC, the District is working to expand multimodal forms of transportation.



In FY 2021, **5,197 electric vehicles were registered** in the District, which was double the registered number in year 2019.

10.75%
NEW ELECTRIC
VEHICLES



10.75 percent of 2021 new vehicle registrations in the District were electric vehicles.

The District Department of Transportation (DDOT) added 7.4 miles of protected bike lanes, and an additional 3.4 miles of standard bike lanes for a total of **10.8 miles of new bike lanes** in 2021.



The Capital Bikeshare program now features 1,000 electric bikes, and announced the purchase of **2,500 more over the next two years**.

DDOT completed its four-year **battery-electric bus demonstration pilot** for the DC Circulator, which will help DDOT transition the entire Circulator fleet to electric buses.

The Clean Energy DC (CEDC) Act, which mandated excise tax incentivizing zero-emissions vehicles, celebrates its first birthday as the DC Government finalizes the **Transportation Electrification Roadmap**.





TRANSPORTATION

CLEAN ENERGY DC PLAN PROGRESS

This chart lists progress made on all actions in the Clean Energy DC Plan.
For more details on the ongoing progress, please visit sustainable.dc.gov/progress.

Not Started ●●●●
Initiated ●●●●
Moderate Progress ●●●●
Significant Progress ●●●●
Completed or Institutionalized ●●●●

ACTION		TIME FRAME	PROGRESS
 EQUITY			
EQ 1:	Build capacity to plan for equity in all energy actions and programs	Long	●●●●
 NEW CONSTRUCTION			
NC 1:	Establish a path to the phased adoption of net-zero codes between 2021 and 2026	Medium	●●●●
NC 2:	Provide a net-zero energy incentive package	Short	●●●●
NC 3:	Issue a net-zero energy innovation request to the Federal Government and regional governments	Medium	●●●●
 EXISTING BUILDINGS			
Energy Efficiency Incentives and Management			
EB 1:	Increase access to building energy performance data for energy efficiency programs	Short	●●●●
EB 2:	Increase DCSEU flexibility	Short	●●●●
EB 3:	Provide the incentives necessary to operate a District-wide deep energy retrofit program	Long	●●●●
EB 4:	Coordinate and centrally track District efficiency and finance programs	Short	●●●●
Policy and Program Recommendations			
EB 5:	Implement a Building Energy Performance Standard	Long	●●●●
EB 6:	Drive energy efficiency at tenant build-out	Medium	●●●●
EB 7:	Encourage the adoption of green leases through education and training	Short	●●●●
EB 8:	Develop a virtual energy audit program	Medium	●●●●
Action on District Government Buildings			
EB 9:	Lead by example in District Government operations	Long	●●●●
EB 10:	Generate, evaluate, and prioritize a list of actions that the can be taken immediately	Short	●●●●
 CROSS-CUTTING BUILDING ACTIONS			
Increasing and Improving Access to Funding and Financing			
CCB 1:	Establish a Green Bank and increase other funding for energy efficiency and renewable energy projects in new and existing buildings	Short	●●●●
CCB 2:	Enhance the District's Property Assessed Clean Energy financing program	Medium	●●●●
Policy and Program Recommendations			
CCB 3:	Ensure code compliance in all buildings through increased investment in robust code enforcement	Short	●●●●
CCB 4:	Incentivize and require submetering	Medium	●●●●
CCB 5:	Develop a centralized online platform for residential energy efficiency programs	Medium	●●●●
Education and Training			
CCB 6:	Maintain an ongoing outreach program to foster and expand awareness, education, and opportunities for collaborating around high-performance buildings	Short	●●●●
CCB 7:	Partner to support training and certification of building contractors and managers	Medium	●●●●
CCB 8:	Integrate energy performance information into residential transactions	Long	●●●●
Leadership and Catalyzing Change			
CCB 9:	Create or Leverage Existing Mid-Atlantic government leadership groups to accelerate market transition	Short	●●●●
CCB 10:	Build examples of breakthrough design in government and/or publicly-financed buildings	Short	●●●●
CCB 11:	Recognize leadership with a catalog of best performing buildings and a cohort of local building energy leaders	Short	●●●●
CCB 12:	Implement a high-performance energy media, outreach, and communications strategy	Medium	●●●●
CCB 13:	Create a coordinated green jobs and workforce development platform	Short	●●●●

ACTION		TIME FRAME	PROGRESS
 CLEAN AND RENEWABLE ENERGY SUPPLY			
Renewable Electricity Supply From Outside the District			
CRE 1:	Design and manage the RPS to drive renewable energy generation and GHG reductions	Long	● ● ● ●
CRE 2:	Provide the Standard Offer Service through aggregated power purchase agreements	Long	● ● ● ●
CRE 3:	Enact legislation that sets a maximum GHG intensity for electricity supplied to the District	Medium	● ● ● ●
Renewable Electricity Supply within the District			
CRE 4:	Develop a centralized solar information and commerce platform	Short	● ● ● ●
CRE 5:	Continue to refine and implement the targeted solar proliferation strategy	Short	● ● ● ●
CRE 6:	Adopt solar-ready and renewable energy generation building code requirements	Medium	● ● ● ●
Thermal Energy Supply and Distributed Energy Resource Integration within the District			
CRE 7:	Undertake a built environment thermal decarbonization study	Short	● ● ● ●
CRE 8:	Develop a neighborhood-scale energy strategy	Short	● ● ● ●
 ENERGY SYSTEM MODERNIZATION			
Planning and Coordination			
ESM 1:	Define a vision of the future grid and characterize the stages of grid modernization	Short	● ● ● ●
ESM 2:	Adopt a framework for valuing distributed energy resource costs and benefits	Short	● ● ● ●
ESM 3:	Support the collaborative development of an integrated distribution plan	Medium	● ● ● ●
ESM 4:	Intervene in Public Service Commission proceedings related to grid modernization	Long	● ● ● ●
Analysis of the Electricity System Needs and Capabilities			
ESM 5:	Outline a path to overcome legislative and regulatory barriers to grid modernization	Short	● ● ● ●
ESM 6:	Conduct a hosting capacity study of the District's distribution grid	Short	● ● ● ●
ESM 7:	Develop a location-based profile of energy use and GHG emissions	Short	● ● ● ●
Immediate "No-Regrets" Actions and Proof of Concept Projects			
ESM 8:	Generate, evaluate, and prioritize a list of actions that the can be taken immediately	Short	● ● ● ●
ESM 9:	Leverage existing advanced metering infrastructure data	Short	● ● ● ●
ESM 10:	Identify near-term projects that should be coordinated with grid modernization activities	Short	● ● ● ●
ESM 11:	Pursue pilot projects related to key modernization capabilities and technologies	Short	● ● ● ●
 ELECTRIC VEHICLES			
Electric Vehicle Readiness			
EV 1:	Adopt an EV-ready building code	Short	● ● ● ●
EV 2:	Adopt an EV-ready parking lot requirement	Short	● ● ● ●
Electric Vehicle Adoption			
EV 3:	Implement an EV bulk buy program	Short	● ● ● ●
EV 4:	Establish an EV Showcase and Purchase Center	Short	● ● ● ●
EV 5:	Provide an EV purchase incentive	Short	● ● ● ●
EV 6:	Pursue an EV-only car sharing fleet	Medium	● ● ● ●
Shifting to Zero Emission Transit Vehicles			
EV 7:	Set target for reducing transit bus emissions 65% per vehicle mile by 2032	Short	● ● ● ●
EV 8:	Pursue funding options to subsidize electric transit buses, and electric charging infrastructure	Short	● ● ● ●
Anticipating Electric Autonomous Ride-hailing Vehicles			
EV 9:	Prepare for reduced parking demand near activity centers	Medium	● ● ● ●
EV 10:	Provide financial incentives encouraging shared autonomous vehicle travel	Long	● ● ● ●
EV 11:	Adjust approaches to managing curb space	Medium	● ● ● ●



doee.dc.gov/cleanenergydc

WE ARE WASHINGTON
GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR



@DOEE_DC

#CleanEnergyDC