

## COUNCIL OF THE DISTRICT OF COLUMBIA THE JOHN A. WILSON BUILDING 1350 PENNSYLVANIA AVENUE, NW WASHINGTON, DC 20004

Charles Allen Councilmember, Ward 6 Chairperson Committee on Transportation and the Environment Committee Member Business and Economic Development Health The Judiciary & Public Safety

November 8, 2024

Nyasha Smith, Secretary Council of the District of Columbia 1350 Pennsylvania Avenue, NW Washington, D.C. 20004

Today, along with Councilmembers Frumin, Lewis George, Nadeau, and Robert White, I am introducing the *"Solar Shade Expansion Amendment Act of 2024"*.

The summer of 2024 was one of the hottest seasons recorded since 1880, narrowly beating heat records set just a year earlier in 2023.<sup>1</sup> The scientific evidence has made it abundantly clear that human activity is the most significant driver of the changes in climate we are experiencing locally and around the world. Burning fossil fuels – such as coal, oil, and gas – emits greenhouse gasses that amplify the Earth's natural greenhouse effect, warming the planet at a dangerous rate. In addition to their impact on climate, the burning of fossil fuels also has deleterious effects on human health, as well as air and water quality.

For its part, the District has planned to transition away from fossil fuels and towards clean, renewable sources of energy. For example, the District's Renewable Portfolio Standard requires that 100% of the electricity sold in the city be from renewable sources by 2032 – 5.5% of which must be solar energy. But there is a pressing need to both accelerate our progress towards that goal while also alleviating the impact of extreme weather – especially on our most vulnerable populations, including children.

Solar canopies are a promising tool that can both help mitigate the human impacts on climate while also providing relief from rising temperatures. Solar canopies are structures that elevate solar panels above the ground, generating solar energy while providing shade. Solar canopies help maximize use of limited space in the District for solar panel installations. Solar canopies have

<sup>&</sup>lt;sup>1</sup> National Aeronautics and Space Administration, *NASA Finds Summer 2024 Hottest to Date* (September 11, 2024), <u>https://www.nasa.gov/earth/nasa-finds-summer-2024-hottest-to-date/</u>.

already been mounted over parking decks<sup>2</sup> and school playgrounds<sup>3</sup> in the District. In other countries, like South Korea, for example, solar canopies have also been installed to provide shade over bike lanes.<sup>4</sup>

This legislation would require that the District government identify 20 sites, ranging from playgrounds and parks to sidewalks, bike lanes, and roads, that could benefit from solar canopies. The goals are to provide shade, reduce heat exposure, and provide clean energy to our power grid all at once. The bill then requires funding in the District's Capital Improvements Plan for five capital projects to include solar shade as soon as the FY27 budget and all projects beginning in FY28. It also permits the Department of Energy and Environment to issue grants to private entities in pursuit of solar shade projects.

Sincerely,

Councilmember Charles Allen, Ward 6 Chairperson, Committee on Transportation & the Environment

<sup>&</sup>lt;sup>2</sup> Innovation District, *D.C. leaders unveil city's largest solar canopy at Children's National Research & Innovation Campus* (April 27, 2021), <u>https://innovationdistrict.childrensnational.org/dc-leaders-unveil-citys-largest-solar-canopy-at-research-innovation-campus/</u>.

<sup>&</sup>lt;sup>3</sup> <u>https://www.ludlowtaylor.org/spaces/</u>

<sup>&</sup>lt;sup>4</sup> Hakyung Kate Lee, *Solar panel bike lane generates eco-friendly energy in South Korea*, ABC NEws (September 25, 2022), <u>https://abcnews.go.com/International/solar-panel-bike-lane-generates-eco-friendly-energy/story?id=90197800</u>.

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10 11 12 13		Councilmember Robert C. White, Jr.	
14 15	A BILL		
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18 19 20 21 22	IN THE COUNCIL OF THE DISTRICT OF COLUMBIA		
23 24			
24 25 26 27 28 29 30 31 32 33 34 35	To amend the Clean and Affordable Energy Amendment Act of 2008 to require that the Department of Energy and the Environment publish a feasibility study regarding the installation of solar canopies in the District, to require that the District's capital improvement plan include funding for the installation of solar canopies, to authorize the Department of the Energy and the Environment to issue grants to support the installation of solar canopies, to require that the Department of Energy and the Environment of Energy and the Environment update the original study, and to require that new capital projects included in the capital improvement plan for which the installation of solar canopies is possible shall provide for the installation of solar canopies on some portion or portions of the capital project's footprint.		
35 36	BE IT ENACTED BY THE COUNCIL OF THE	DISTRICT OF COLUMBIA, That this	
37	act may be cited as the "Solar Shade Expansion Amendme	ent Act of 2024".	
38	Sec. 2. The Clean and Affordable Energy Amendr	ment Act of 2008, effective October 22,	
39	2008, (D.C. Law 17-250; D.C. Official Code § 8-1773.0	1 et seq.), is amended by adding a new	
40	section 218 to read as follows:		

41	"Sec. 218. Solar canopy feasibility study; capital funding requirements and grantmaking	
42	authority; updated study.	
43	"(a)(1) By January 1, 2026, DOEE shall conduct and publish a study analyzing the	
44	feasibility of installing solar canopies to expand solar energy generation while providing shade in	
45	at least 20 locations in the District, including at least 5 of each of the following:	
46	"(A) Buildings or land owned by the District, such as recreation centers,	
47	parks, pools, playgrounds, parking lots, and parking decks, selected after consultation with the	
48	Department of General Services and the Department of Parks and Recreation;	
49	"(B) District roadways, sidewalks, bike lanes, and cycletracks, selected	
50	after consultation with the District Department of Transportation; and	
51	"(C) Private property, such as parking decks, surface parking lots, and	
52	common areas in commercial buildings and residential buildings, selected after consultation with	
53	the Department of Buildings.	
54	"(2) The study shall:	
55	"(A) Compare, between various locations in the District, the:	
56	"(i) Potential to generate solar energy;	
57	"(ii) Desirability or benefits of providing shade;	
58	"(iii) Costs of installing solar canopies; and	
59	"(iv) Difficulty of installing solar canopies, including any legal or	
60	administrative barriers unrelated to cost;	
61	"(B) Recommend settings, based on the factors described in subparagraph	
62	(A) of this paragraph, where the installation of solar canopies should be prioritized; and	

63	"(C) Identify at least 5 specific locations in the District where the	
64	installation of at least 500 square feet of solar canopies can feasibly be installed during Fiscal Year	
65	2027.	
66	"(b) Beginning January 1, 2027:	
67	"(1) The multiyear capital improvement plan proposed by the Mayor in the annual	
68	budget pursuant to § 47-339.01(a) shall, for any project encompassing any of the locations	
69	identified in subsection (a)(1) of this section, include funding sufficient to support the installation	
70	of solar canopies; and	
71	"(2) DOEE may issue grants to private entities to support the installation of solar	
72	canopies on private property in settings recommended by the study as described in subsection	
73	(a)(1)(C).	
74	"(c)(1) No later than September 30, 2028, DOEE shall publish an updated study analyzing	
75	the outcomes of any solar canopies installed at locations identified in the original study.	
76	"(2) The updated study conducted pursuant to this subsection shall:	
77	"(A) Update the comparison of factors described in subsection (a)(2)(A) of	
78	this section;	
79	"(B) Identify locations, based on the updated comparison described in	
80	subparagraph (A), where the District should require the installation of other solar canopies in	
81	public and private settings;	
82	"(C) Recommend financial incentives, including grants and tax exemptions,	
83	to facilitate the installation of solar canopies; and	
84	"(D) Describe any regulatory, administrative, or legislative changes that	
85	would expedite or facilitate the installation of solar canopies across the District.	

86 "(d) Beginning January 1, 2030, every new capital project included in the capital 87 improvement plan for which the installation of solar canopies is possible shall provide for the 88 installation of solar canopies on some portion or portions of the capital project's footprint.".

89 Sec. 3. Fiscal impact statement.

90 The Council adopts the fiscal impact statement in the committee report as the fiscal impact
91 statement required by section 4a of the General Legislative Procedures Act of 1975, approved
92 October 16, 2006 (120 Stat. 2038; D.C. Official Code § 1-301.47a).

93 Sec. 4. Effective date.

This act shall take effect after approval by the Mayor (or in the event of veto by the Mayor, action by the Council to override the veto), a 30-day period of congressional review as provided in section 602(c)(1) of the District of Columbia Home Rule Act, approved December 24, 1973 (87 Stat. 813; D.C. Official Code § 1-206.02(c)(1)), and publication in the District of Columbia Register.