

TO: The Honorable Phil Mendelson, Chairman, Council of the District of Columbia

FROM: Namita Mody, Director, Council Office of Racial Equity

DATE: December 5, 2022

COMMITTEE

Committee on Transportation and the Environment

BILL SUMMARY

B24-0950 gradually increases the District's solar energy requirement from 10 to 15 percent by 2041 and slows down the reduction rate of the Alternative Compliance Payment price. The bill also provides funding to increase residents' awareness of the Solar for All program and other utility assistance programs and provides funding to study DC's solar policies every three years.

CONCLUSION

Bill 24-0950 will harm economic outcomes for Black, Indigenous, and Latinx residents in the District of Columbia. Increasing funding for Solar for All and additional utility assistance programs will offset some of the bill's harmful impacts but not enough to offset costs for all residents of color.

FURTHER CONSIDERATIONS

- The bill does not specifically prioritize community solar, despite it being the main way for residents of color to benefit from energy generation in the District.
- The bill does not specify if data disaggregated by race should be collected and analyzed for the studies conducted by the Office of People's Counsel.

Content Warning: The document you are about to read is a Racial Equity Impact Assessment, a careful and organized examination of how Bill 24-0950 will affect different racial and ethnic groups. We hope that this assessment sparks a conversation that is brave, empathetic, thoughtful, and open-minded.

The following content touches on racism, housing, poverty, and energy insecurity. Some or all of these issues may trigger a strong emotional response. We encourage you to use this knowledge in the way that is most helpful to you.

BACKGROUND

The following content describes Bill 24-0950 in plain language for the purposes of discussion. This explanation is not a substitute for the bill, or if passed, the law.

Prior to summarizing B24-0950, this Racial Equity Impact Assessment (REIA) summarizes solar power dynamics in the District to better contextualize the bill's proposal.

Solar Energy Dynamics in the District

Current law requires the District's electricity to come from 100 percent renewable energy by 2032. By 2041, 10 percent must come from solar energy. To meet these goals, the share of renewable energy in the District must increase every year, by law. For 2023, 38.75 percent of DC's electricity must come from renewable energy and 2.85 percent from solar energy.

The required rate for renewable energy is called the Renewable Portfolio Standard (RPS)—the required rate for solar energy is called the "solar carveout." So, for 2023, the RPS is 38.75 percent and the solar carveout is 2.85 percent.

DC's electricity suppliers are required to meet the annual RPS and solar carve out.² This means electricity suppliers need to prove their supplied electricity is sufficiently from renewable and solar energy—or face a fine. The District has 46 electric suppliers, most managed by Pepco.³

To meet the solar carveout, suppliers have two options. They can either 1) buy Solar Renewable Energy Credits (SRECs) or 2) pay the Alternative Compliance Payment (ACP), which is a fee to the DC Government.

SRECs (pronounced "s-rehks") are credits that residents with solar panels sell to electricity suppliers. SRECs are created by the DC Government and subsidize the cost to install solar panels. A resident with solar panels gets SRECs every year equal to the amount of energy they produce—in a sense, residents are paid to generate solar energy.

The average price for one SREC from 2017-2021 was \$400.4 SRECs are generated by the megawatt hour (mwh), meaning one SREC equals one produced megawatt-hour. For reference, a DC resident with a solar panel system of ten kilowatts (the amount needed to cover a DC household's energy for a year) can roughly produce ten megawatt-hours (mwh) per year. This means a resident with solar panels could earn up to \$4,000 (\$400 x 10mwh) every year by selling their SRECs to electricity suppliers.

Currently, electricity suppliers meet 90 percent of their required RPS and solar carveout mandate by buying SRECs. For the remaining 10 percent, they pay the Alternative Compliance Payment (ACP) fine to the DC Government.

The Alternative Compliance Payment (ACP) fine is set by the law at \$500 per megawatt hour. The price of SRECs is not set by the law, but rather influenced by the price of the ACP. If the ACP price goes up, the SREC price goes up, and if the ACP price goes down, the SREC price goes down. The SREC price is usually 80 percent of the ACP price, hence why SRECs sell roughly for \$400 (80 percent of \$500). The ACP is the maximum price electricity suppliers pay to meet their solar carveout. Electricity suppliers pay the ACP fine when they cannot buy enough SRECs. In 2021, for the first time, there were enough installed solar panels in the District for suppliers to meet the solar carveout by exclusively buying SRECs, though some still paid the ACP.⁵

Bill Summary

Bill 24-0950 has four main parts.

First, if passed, B24-0950 will increase the solar carveout rate from 10 percent to 15 percent by 2041. It will also slow down the reduction rate of the Alternative Compliance Payment (ACP) price in the current law

⁵ Ibid.



¹ § 34–1432. Renewable energy portfolio standard., Pub. L. No. 24–190, 34–1432 Code of the District of Columbia

² "Status of Electric Competition, Number of Customer Accounts and Market Shares." DC Public Service Commission, October 2022.

³ "Renewable Energy Portfolio Standards, 2021." DC Public Service Commission, May 2, 2022.

⁴ Ibid., Page 17.

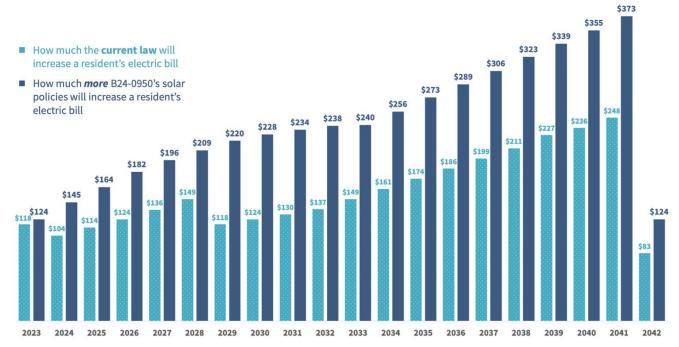
between 2024 and 2032, except in 2028. Both the solar carveout and the ACP price—together—impact resident's electric bills. The solar carveout determines the *volume* of SRECs in the market, while the ACP influences the *price* of SRECs. Changing either the solar carveout or the ACP impacts resident's electric bills—B24-0950 changes both.

The current law sets the ACP price at \$500 through 2023, then \$400 between 2024-2028, and \$300 between 2029-2041. The bill would maintain the \$500 price through 2023 and reduce it by \$20 every year until it reaches \$300 in 2033. This would mean a higher ACP price (and SREC price) from 2024 through 2032. The bill does not change the ACP price after 2032, but it increases the solar carveout (the volume of SRECs) through 2041, which means higher electric bills for residents. Because electric suppliers will have to pay more for the ACP (and therefore SRECs), electric suppliers will likely charge customers more to maintain a profit.

These changes will result in the following estimated increases to residents' electric bills every year through 2042 (see Figure 1). (To clarify, residents' electric bills are estimated to increase based on current law, as illustrated by the teal bars in Figure 1. This bill, however, would lead to larger increases.) If Bill 24-0950 passes, residents would pay on average \$54 more every year between 2024 and 2028 and then \$106 more every year until 2041. Figure 2 shows how the bill would increase monthly electric bills for residents (with the bill's changes italicized and in navy blue). Starting in 2024, residents would pay \$4.50 more every month through 2028 and then \$8.80 more every month until 2042.

FIGURE 1

Yearly Increase to Electric Bills due to DC's Solar Policies



Source: Calculations done by CORE. Data from Committee Print. See detailed table in Appendix for additional information on calculations.



FIGURE 2 B24-0950 would increase electric bills *every month* by \$7 on average through 2042.

Year	Current Law Solar Carveout (%)	B24-0950 Solar Carveout (%)	Current Law ACP Price	B24-0950 ACP Price	How Current Law Increases <u>Monthly</u> Electric Bills	How B24-0950 Increases <u>Monthly</u> Electric Bills	Monthly Increase from B24-0950
2023	2.85	3.00	\$500	\$500	\$10	\$10	+\$1
2024	3.15	3.65	\$400	\$480	\$9	<i>\$12</i>	+ \$3
2025	3.45	4.30	\$400	\$460	\$10	\$14	+ \$4
2026	3.75	5.00	\$400	\$440	\$10	<i>\$15</i>	+ \$5
2027	4.10	<i>5.65</i>	\$400	\$420	\$11	<i>\$16</i>	+ \$5
2028	4.50	6.30	\$400	\$400	\$12	\$17	+ \$5
2029	4.75	7.00	\$300	\$380	\$10	\$18	+ \$9
2030	5.00	7.65	\$300	\$360	\$10	\$19	+ \$9
2031	5.25	8.30	\$300	\$340	\$11	<i>\$19</i>	+ \$9
2032	5.50	9.00	\$300	\$320	\$11	\$20	+ \$8
2033	6.00	9.65	\$300	\$300	\$12	\$20	+ \$8
2034	6.5	10.3	\$300	\$300	\$13	<i>\$21</i>	+ \$8
2035	7	11	\$300	\$300	\$14	<i>\$23</i>	+ \$8
2036	7.5	11.65	\$300	\$300	\$16	\$24	+ \$9
2037	8	<i>12.3</i>	\$300	\$300	\$17	<i>\$25</i>	+ \$9
2038	8.5	<i>13</i>	\$300	\$300	\$18	\$27	+ \$9
2039	9.15	<i>13.65</i>	\$300	\$300	\$19	<i>\$28</i>	+ \$9
2040	9.5	14.3	\$300	\$300	\$20	\$30	+\$10
2041	10	<i>15</i>	\$300	\$300	\$21	<i>\$31</i>	+\$10
2042	10	<i>15</i>	\$100	\$100	\$7	\$10	+ \$3

Source: Calculations done by CORE. Data from Committee Print. The italicized numbers in navy blue are changes from B24-0950. See detailed table in Appendix for detailed amounts and assumptions.

For detailed changes in solar carveout rates and ACP prices for every year through 2042, please see the Appendix. Understandably, there are competing estimates for how much the bill will increase electric bills given some estimates include potential benefits of more solar energy and electric grid efficiency over time. In all estimates, however, electric bill prices will increase. A 2017 study on the benefits of solar energy in DC found that solar's social benefits and grid efficiencies could reduce electric bill costs for residents—this REIA references the study but does not integrate these benefits into Figures 1 and 2 given the exhaustive nature of these calculations.⁶

Second, starting in 2026, the bill will transfer funds from the Renewable Energy Fund to the Energy Assistance Trust Fund to "[expand] access to the District's low-income utility assistance programs." The Renewable Energy Development Fund is primarily funded by the Alternative Compliance Payments that utility suppliers (and, indirectly, residents) pay to the District.

Third, starting in 2025, the bill will provide *up to* \$150,000 every year to increase awareness of the Solar for All program, with the goal of increasing the number of participants in all of DC's low-income utility assistance programs. (The number of program participants in comparison to the number of people eligible is often referred to as the "take up rate" of a program.)

⁶ Whited, Melissa, Ariel Horowitz, Thomas Vitolo, Wndy Ong, and Tim Woolf. "<u>Distributed Solar in the District of Columbia</u>." DC Office of the People's Counsel, April 12, 2017.



Finally, the bill will provide \$100,000 every year to the Office of People's Counsel to study local solar policies every three years. The first study is due October 1, 2027. The study would:

- analyze the benefits and costs of solar requirements,
- assess the benefits of locally produced solar energy for DC's electric grid, clean energy goals, and programs (such as Solar for All),
- identify costs to residents,
- review solar power policies from other jurisdictions (federal, states, cities, etc.), and
- provide policy recommendations.

Who Financially Benefits from the District's Solar Carveout and ACP Mechanism?

B24-0950 has a negligible impact on the District's climate change goals. Importantly, current law already requires the District's electricity to come from 100 percent renewable energy by 2032⁷—the most ambitious renewable energy goal among US states.⁸ This bill, however, does not change this mandate. Rather, it increases the *type* of renewable energy (solar) that makes up DC's electric grid. This REIA assumes solar energy mitigates climate change generally as well as other renewable energies. Therefore, this REIA will focus on the bill's financial impacts.

In short, the solar carveout is a subsidy for the solar industry and for wealthier residents who can afford to install solar panels. It creates the SREC marketplace, which reduces the cost of solar panel installation for residents and increases demand for solar energy businesses and jobs in the District. All residents, including those with low and moderate incomes, indirectly pay for these subsidies through their electric bills. Figure 3 shows how different groups in the District are impacted by the solar carveout.

FIGURE 3 The solar industry *benefits* the most while renters and households with low and moderate incomes are *harmed* the most.

Actor	Impact of the Solar Carveout	Benefit/Harm?		
Solar Energy Businesses and Workers	Solar businesses have installed nearly 10,000 solar energy systems in the District, many of which have occurred since the solar carveout and ACP phasedown were amended in 2016. Wards 4, 5, 7, and 6 (in order) have the most solar systems in place. Installations in Wards 4 and 6 are likely to be private home installations whereas installations in Ward 8 are commercial or community based. Urrently there are 1,100 solar jobs in the District. Notably, jobs decreased from a high of 1,300 in 2017 despite increases in the solar carveout and constant SREC price (and this trend began before the pandemic, which upended many industries). The average subsidy per solar job has more than doubled since 2018, from \$46,000 to \$94,000. In 15 Increasingly subsidized wages help cover costs for solar businesses.	Solar businesses benefit from the District's solar policies. Solar workers benefit from the District's solar requirements because they increase demand for solar energy. Job creation has been stagnant, though stable.		

⁷ § 34–1432. Renewable energy portfolio standard., Pub. L. No. 24–190, 34–1432 Code of the District of Columbia

¹⁵ "Renewable Energy Portfolio Standards, 2021." DC Public Service Commission, May 2, 2022.



⁸ "Map and Timelines of 100% Clean Energy States," Clean Energy States Alliance.

⁹ "Renewable Energy Portfolio Standards, 2021." DC Public Service Commission, May 2, 2022.

¹⁰ Ibid.

¹¹ Camp, Erin, Ben Havumaki, Thomas Vitolo, and Melissa Whited. "<u>Future of Solar PV in the District of Columbia</u>." DC Office of the People's Counsel, May 28, 2020.

¹² "Public Hearing for B24-0950, Testimony from the Chesapeake Solar and Storage Association," October 3, 2022.

¹³ "Public Hearing for B24-0950, Testimony from Alex Lopez ANC 6E02 Commissioner," October 3, 2022.

¹⁴ "Solar Jobs Census 2021." Interstate Renewable Energy Council.

Residents who <u>can</u> afford solar panels

- Wealthier residents
- More likely white residents
- Commercial property owners

On average, a resident would pay approximately \$18,000 before subsidies and roughly \$13,000 after federal subsidies for a typical 5kw solar energy system. ¹⁶ In addition, a resident can recover nearly the entire initial cost of the system over the course of several years by selling SRECs. However, installing solar panels is still a significant upfront investment that most people cannot afford. During the bill's public hearing, one Ward 6 resident said they paid \$42,000 dollars to install solar panels on their home. ¹⁷

In the District, white residents are more likely to have higher incomes and own and live in single family detached homes. ¹⁸ White residents have historically benefited from greater access to education, employment, income, and wealth-building opportunities which excluded Black, Indigenous, and other residents of color. ¹⁹ During the bill's testimony, Alex Lopez, the ANC 6E02 commissioner, noted that "the proceeds of the local solar subsidies largely flow to owner-occupied single-family households, commercial property-owners, and, increasingly, to solar projects located in Maryland."²⁰

Wealthier residents and commercial property owners **benefit** from the District's solar policies as they allow them to recover their large upfront costs over several years.

Residents who <u>cannot</u> afford solar panels

- Most residents
- More likely Black, Indigenous, and Latinx residents
- Low-income or low-wealth homeowners
- Renters

Most residents do not have the upfront money needed to install solar panels on their homes. Notably, residents with lower and moderate incomes pay a larger share of their income for electric costs, and thus solar subsidies. ²¹

Furthermore, most residents are renters and thus ineligible for benefits of private solar panel installation. ²² Black, Indigenous, and Latinx residents are more likely to have lower incomes ²³ and be renters. ²⁴ Redlining ²⁵ and racial covenants ²⁶ on top of years of restrictions on wealth building opportunities ²⁷ have led to dramatic inequities in homeownership rates and income across racial groups.

Renters benefit if their buildings install solar panels or if they sign up for Solar for All which lowers their electric bill through community solar systems. Importantly, however, there has been limited community solar installation in the District.²⁸

Additional efficiencies in the grid as a result of more solar generated power in the District could decrease electric bills, generally, but these benefits are hard to quantify, according to the DC Department of Energy and the Environment.²⁹

Homeowners who cannot afford a large upfront cost generally **lose** from the solar carveout and ACP mechanism.

Residents with lower and moderate incomes **lose** as they pay the most (proportionally) for solar subsidies and are less likely to afford or be eligible for solar panel installation.

Renters generally **lose** as well, though some their higher electric costs can be partially offset by the Solar for All program.

²⁹ "Public Hearing for B24-0950, Testimony from the DC Department of Energy and Environment," October 3, 2022.



¹⁶ EnergySage. "Solar Panel Cost in Washington D.C.," November 9, 2022.

¹⁷ "Public Hearing for B24-0950, Testimony from Amy Hubbard," October 3, 2022.

¹⁸ Council Office of Racial Equity. "DC Racial Equity Profile for Economic Outcomes."

¹⁹ Ibid.

²⁰ "Public Hearing for B24-0950, Testimony from Alex Lopez ANC 6E02 Commissioner," October 3, 2022.

²¹ US Department of Energy. "Low-Income Energy Affordability Data (LEAD) Tool."

²² Homeownership Rates by Race in the District of Columbia, National Equity Atlas, 2019.

²³ Council Office of Racial Equity. "DC Racial Equity Profile for Economic Outcomes."

²⁴ Homeownership Rates by Race in the District of Columbia, National Equity Atlas, 2019.

²⁵ Mapping Segregation in D.C., Sarah Shoenfeld, DC Policy Center.

²⁶ Ibid.

²⁷ The Color of Wealth in the Nation's Capital, The Urban Institute, November 2016.

²⁸ Camp, Erin, Ben Havumaki, Thomas Vitolo, and Melissa Whited. "<u>Future of Solar PV in the District of Columbia</u>." DC Office of the People's Counsel, May 28, 2020.

Regardless of how electricity suppliers meet the solar carveout (by purchasing SRECs or paying the ACP), their costs are passed down—almost in full—to all resident's electric bills. To offset some of these increased electric costs for residents with lower incomes, the law requires fines from ACP to be used for programs that reduce electric and gas costs, such as Solar for All.³⁰

Solar for All Program

The Solar for All program was created in 2016 to offset the costs of the solar carveout and ACP mechanism for residents with lower and moderate incomes. The program's goal is to decrease electric bills by 50 percent for 100,000 residents by 2032. As of 2022, the program "provides 9,000 families with \$500 of utility assistance per year," according to public testimony from the DC Department of Energy and the Environment. The average annual electric bill for a household with low and moderate income is approximately \$1,100,32 so the program almost subsidizes 50 percent. Nearly 114,00 households with low and moderate incomes live in the District—67 percent of them are Black. This is due to a relentless denial of education, employment, income, and wealth-building opportunities to Black residents.

At its current enrollment pace and in a best-case scenario, the program will achieve its 100,000 participant goal. Importantly, the goal is to reach 100,000 by 2032 in a gradual manner. Though the program is regarded as highly successful,³⁵ it would not reach tens of thousands of households, most of whom are Black, who would see a median increase in their electric bill of \$102 every year between 2023-2041 (see Figure 1).

The Solar for All program reduces a household's electric bill by building community solar. Community solar is a model of solar energy generation that works like a farm. It involves building energy systems in the District's open land, government land, parking lots, and commercial buildings, for example, and distributes the credits (money) to reduce electric bills among residents, who can be both renters and homeowners. For renters, this is the main way to benefit from solar generation in the District.

The program is primarily funded by the ACP fines that electricity suppliers pay to meet the RPS. Notably, ACP is a dwindling funding source. Electricity suppliers pay less ACP every year, and thus there is less available funding for Solar for All. In 2021, \$5.7 million was paid in ACP with payments decreasing by approximately 30 percent every year since 2017. Notably, electricity suppliers paid ACP despite sufficient SRECs on the market in 2021 to meet the solar carveout.

Other programs that help with electric bill costs include Low Income Home Energy Assistance Program (LIHEAP), the Utility Discount Program, and the Weatherization Assistance Program, all administered by the Department of Energy and the Environment.³⁷

RACIAL EQUITY IMPACTS

Bill 24-0950 will harm economic outcomes for Black, Indigenous, and Latinx residents. Black and Hispanic residents are the most burdened by energy costs.³⁸ The median energy burden for Black and

³⁷ Drehobl, Ariel, Diana Hernández, Roxana Ayala, and Lauren Ross. "<u>An Examination of District Residents' Experiences with Utility Burdens and Affordability Programs</u>." DC Department of Energy and Environment, March 2021.
³⁸ Ibid.



³⁰ § 34-1436. Renewable Energy Development Fund, Pub. L. No. 24-190, 34-1436 Code of the District of Columbia

^{31 &}quot;Public Hearing for B24-0950, Testimony from the DC Department of Energy and Environment," October 3, 2022.

³² US Department of Energy. "Low-Income Energy Affordability Data (LEAD) Tool."

³³ "Energy Affordability Study Population Characterization Report." DC Office of the People's Counsel, December 2020.

³⁴ D.C. Policy Center and Council Office of Racial Equity. "DC Racial Equity Profile for Economic Outcomes."

³⁵ Public Hearing for B24-0950, October 3, 2022.

³⁶ "Renewable Energy Portfolio Standards, 2021." DC Public Service Commission, May 2, 2022.

Hispanic households in the District is 45 percent higher than that of white households.³⁹ This is likely due to Black and Latinx households being overrepresented in households with lower and moderate incomes, due to structural racism.⁴⁰

In the District, renters and households with low and moderate incomes use a larger share of their income to pay their electric bill (see Figure 4). As a result, the electric bill increases cost renters and households with lower incomes more than homeowners and households with higher incomes. Black, Indigenous, and Latinx households are more likely to be renters⁴¹ and are overrepresented in low and moderate income groups, so they proportionally pay the most for DC's solar policies—yet benefit the least from them. This bill exacerbates this inequity.

Despite Solar for All's effort and success, it cannot remedy the bill's economic harm for *all* affected residents and will not reach tens of thousands of residents for several years—in a best-case scenario. Meanwhile, these residents will face higher electric bills every month and year through 2041.

There is another important racial inequity in the solar carveout and ACP mechanism: it helps wealthy residents (most likely white) gain more wealth at the

FIGURE 4 Electric bills consume a larger share of income for households with lower incomes.

Income Level	Share of Income used to Pay Average Annual Electric Bill				
0-30% AMI	9% of income (average annual bill: \$1,188)				
30-60% AMI	3% of income (\$1,146)				
60-80% AMI	2% of income (\$1,125)				
80-100% AMI	2% of income (\$1,108)				
100%+ AMI	1% of income (\$1,202)				

Source: US Department of Energy. "Low-Income Energy Affordability Data (LEAD) Tool."

expense of everyone else (most likely residents of color). With this bill wealthy residents can 1) install solar panels on their homes nearly for free, 2) fully cover their electric costs, and 3) increase the value of their homes because of the added value of solar panels.

The Solar for All program and additional utility assistance programs are not enough to offset the bill's harmful economic impacts on Black, Indigenous, and other residents of color. A government program that requires residents to sign up is unlikely to reach everyone who is harmed by this bill—regardless of impressive outreach, which the bill further funds. Increasing funding for outreach, however, may help the program reach eligible residents of color sooner.

For context, the federally funded Low-Income Energy Assistance Program is one of the oldest energy assistance programs in the US. In 2020, nearly 15,800 District residents were enrolled,⁴² a participation rate of 35 percent.⁴³ Even a consistent program with relatively good outreach is unlikely to reach the majority of people.

The bill will have an inconclusive impact on Black, Latinx, and other solar workers of color. Solar workers benefit from DC's solar policies because they increase demand for solar jobs. The District has

⁴³ "Energy Affordability Study Population Characterization Report." DC Office of the People's Counsel, December 2020.



³⁹ Ibid.

⁴⁰ Council Office of Racial Equity. "DC Racial Equity Profile for Economic Outcomes."

⁴¹ Homeownership Rates by Race in the District of Columbia, National Equity Atlas, 2019.

⁴² Drehobl, Ariel, Diana Hernández, Roxana Ayala, and Lauren Ross. "<u>An Examination of District Residents' Experiences with Utility Burdens and Affordability Programs.</u>" DC Department of Energy and Environment, March 2021.

approximately 1,100 solar jobs. Higher ACP prices and larges solar carveouts were meant to increase solar jobs, but they have been stagnant since 2018.⁴⁴

The DC Council Committee on Transportation and the Environment estimates the trajectory of current solar policies would decrease solar jobs in 2025 and then rebound to current numbers by 2033. In the US, Black solar workers (8 percent) are underrepresented in the solar workforce while Hispanic (20 percent) and Asian (9 percent) are overrepresented. We are uncertain of racial and ethnic demographics of DC's solar workforce. Given previous trends, it is uncertain how much jobs will fluctuate with the current law and how the bill would impact those fluctuations. Therefore, the bill's impact on solar workers of color in the District is inconclusive.

FURTHER CONSIDERATIONS

The bill does not specifically prioritize community solar, despite it being the main way for residents of color to benefit from solar energy generation in the District. Currently, residents of color pay the most for solar subsidies and benefit the least. Unlike private home solar panels, community solar systems are larger and tend to be built on open land, parking lots, and other similar spaces with the goal of sharing energy credits among the public to reduce their energy costs. Prioritizing community solar beyond Solar for All would more equitably distribute the benefits of solar generation in the District. Community solar in the District is nascent. It has the greatest potential for growth, especially in Wards 7 and 8.46 Though likely more expensive, it benefits renters and low and moderate incomes residents more than private solar installation. Community solar benefits from the Solar for All program and higher SREC prices (both of which DC already has), but uptake has been minimal. The bill does not specify how it will increase the uptake of community solar.

The bill does not specify if data disaggregated by race should be collected and analyzed for the studies conducted by the Office of People's Counsel. Having data by race and ethnicity for the distribution of solar installation in the District would help better identify the benefits and costs of the solar carveout and ACP mechanism to residents of color.

ASSESSMENT LIMITATIONS

Alongside the analysis provided above, the Council Office of Racial Equity encourages readers to keep the following limitations in mind:

We generally do not provide policy solutions or alternatives to address our racial equity concerns. While Council Period 24 Rules allow our office to make policy recommendations, we focus on our role as policy analysts—we are not elected policymakers or committee staff. In addition, and more importantly, racially equitable policymaking takes time. Because we only have ten days for our review, we would need more time to ensure comprehensive research and thorough community engagement inform our recommendations.

Assessing legislation's potential racial equity impacts is a rigorous, analytical, and organized undertaking—but it is also an exercise with constraints. It is impossible for anyone to predict the future, implementation does not always match the intent of the law, critical data may be unavailable, and today's

⁴⁶ Camp, Erin, Ben Havumaki, Thomas Vitolo, and Melissa Whited. "<u>Future of Solar PV in the District of Columbia</u>." DC Office of the People's Counsel, May 28, 2020.





^{44 &}quot;Public Hearing for B24-0950, Testimony from Alex Lopez ANC 6E02 Commissioner," October 3, 2022.

⁴⁵ "Solar Jobs Census 2021." Interstate Renewable Energy Council.

circumstances may change tomorrow. Our assessment is our most educated and critical hypothesis of the bill's racial equity impacts.

Regardless of the Council Office of Racial Equity's final assessment, the legislation can still pass. This assessment intends to inform the public, Councilmembers, and Council staff about the legislation through a racial equity lens. However, a REIA is not binding.

This assessment aims to be accurate and useful, but omissions may exist. Given the density of racial equity issues, it is unlikely that we will raise *all* relevant racial equity issues present in a bill. In addition, an omission from our assessment should not: 1) be interpreted as a provision having no racial equity impact or 2) invalidate another party's racial equity concern.



APPENDIX

FIGURE 4 Estimate of B24-0950's new solar carveout and ACP phasedown impact on electric bills.

Year	Current Law Solar Carveout (%)	B24-0950 Solar Carveout (%)	Current Law ACP Price (\$)	B24-0950 ACP Price (\$)	Current SREC Cost (\$)	New Likely SREC price (\$)	Current Dollar/mwh for Solar Energy	New Likely Dollar/mwh for Solar Energy	Current Carveout Impact on Yearly Rates for Residents	New Carveout Impact on Yearly Rates for Residents	Difference on Resident's Yearly Electric Bill
2021	2.5	NA	500	500	400	400	\$10	\$10	\$104	NA	\$0
2022	2.6	NA	500	500	400	400	\$10	\$10	\$108	NA	\$0
2023	2.85	3	500	500	400	400	\$11	\$12	\$118	\$124	\$6
2024	3.15	3.65	400	480	320	384	\$10	\$14	\$104	\$145	\$41
2025	3.45	4.3	400	460	320	368	\$11	\$16	\$114	\$164	\$50
2026	3.75	5	400	440	320	352	\$12	\$18	\$124	\$182	\$58
2027	4.1	5.65	400	420	320	336	\$13	\$19	\$136	\$196	\$61
2028	4.5	6.3	400	400	320	320	\$14	\$20	\$149	\$209	\$60
2029	4.75	7	300	380	240	304	\$11	\$21	\$118	\$220	\$102
2030	5	7.65	300	360	240	288	\$12	\$22	\$124	\$228	\$104
2031	5.25	8.3	300	340	240	272	\$13	\$23	\$130	\$234	\$103
2032	5.5	9	300	320	240	256	\$13	\$23	\$137	\$238	\$102
2033	6	9.65	300	300	240	240	\$14	\$23	\$149	\$240	\$91
2034	6.5	10.3	300	300	240	240	\$16	\$25	\$161	\$256	\$94
2035	7	11	300	300	240	240	\$17	\$26	\$174	\$273	\$99
2036	7.5	11.65	300	300	240	240	\$18	\$28	\$186	\$289	\$103
2037	8	12.3	300	300	240	240	\$19	\$30	\$199	\$306	\$107
2038	8.5	13	300	300	240	240	\$20	\$31	\$211	\$323	\$112
2039	9.15	13.65	300	300	240	240	\$22	\$33	\$227	\$339	\$112
2040	9.5	14.3	300	300	240	240	\$23	\$34	\$236	\$355	\$119
2041	10	15	300	300	240	240	\$24	\$36	\$248	\$373	\$124
2042	10	15	100	100	80	80	\$8	\$12	\$83	\$124	\$41
•		Median	\$300	\$310	\$240	\$248	\$14	\$23	\$143	\$236	\$101

Assumptions:

- One resident's annual use of electricity is 10,350 kwh, or 10.35 megawatts.
- Total number of residents who consume electricity is 309,797, based on October 2022 reporting from the Public Service Commission.⁴⁸
- Residents in the District consume 3,206,399 mwh every year (10.35 mwh multiplied by 309,797 consumers).
- Residential consumption of DC's electricity is 25 percent.
- DC consumes about 12,825,596 mwh every year (based on residents consuming 3,206,399 mwh).
- SREC price is 80 percent of the ACP price.

⁴⁸ "Status of Electric Competition, Number of Customer Accounts and Market Shares." DC Public Service Commission, October 2022.

