

**CONSUMER FINANCIAL PROTECTION BUREAU**

**Environmental Assessment and Finding of No Significant Impact**

**AGENCY:** Consumer Financial Protection Bureau.

**ACTION:** Notice.

**SUMMARY:** The Consumer Financial Protection Bureau (CFPB) is issuing this finding of no significant impact and accompanying environmental assessment regarding the CFPB's consideration of a proposed rule to implement a Congressional mandate to establish consumer protections for residential Property Assessed Clean Energy (PACE) financing. Based on the environmental assessment, the CFPB has concluded that there will be no significant effects on the human environment from the proposed PACE rule, and therefore, a finding of no significant impact is appropriate.

**DATES:** The environmental assessment and finding of no significant impact will be available [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**FOR FURTHER INFORMATION CONTACT:** George Karithanom, Regulatory Implementation and Guidance Program Analyst, Office of Regulations, at 202-435-7700 or <https://reginquiries.consumerfinance.gov/>. If you require this document in an alternative electronic format, please contact CFPB\_Accessibility@cfpb.gov.

**SUPPLEMENTARY INFORMATION:**

**I. Environmental Assessment**

**Description of the Proposed Action**

On May 11, 2023, the CFPB published in the *Federal Register* a proposed rule to implement a Congressional mandate to establish consumer protections for residential Property

Assessed Clean Energy (PACE) financing. PACE loans, which cover the costs of home improvements and result in a tax assessment on the consumer’s real property, are often promoted as a way to finance clean energy improvements such as solar panels. The CFPB proposed to require lenders to assess a borrower’s ability to repay a PACE loan and to provide a framework for how these loans will be treated under the Truth in Lending Act (TILA). Section 307 of the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) directs the CFPB to prescribe ability-to-repay rules for PACE financing and to apply the civil liability provisions of TILA for violations.<sup>1</sup> The proposed rule would implement EGRRCPA section 307 and amend Regulation Z to address the application of TILA to “PACE transactions” as defined in proposed § 1026.43(b)(15). This environmental assessment constitutes the CFPB’s review of potential environmental impacts from issuing the proposed PACE rule.<sup>2</sup>

### **Purpose and Need for the Proposed Action**

The purpose and need for the proposed rule is to fulfill the Congressional mandate in the EGRRCPA to establish certain consumer protections for residential PACE loans. The proposed rule’s purpose and need are further described in the preamble of the proposed rule.<sup>3</sup>

### **Environmental Impacts of the Proposed Action**

None of the requirements of the CFPB’s proposed rule would have direct effects on the human environment. However, the CFPB expects that fewer PACE loans would be originated as a consequence of the proposed rule. This may occur, for example, because the proposed rule

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<sup>1</sup> 15 U.S.C. 1639c(b)(3)(C), Pub. L. 115–174 (2018).

<sup>2</sup> The final PACE rule, published in the same *Federal Register* edition, implements the proposal with small changes that do not affect the environmental analysis.

<sup>3</sup> See 88 FR 30388 (May 11, 2023).

would require a determination that consumers have the ability to repay the PACE loan, and so consumers who do not have an ability to repay may not qualify for PACE loans, or because the home improvement contractors who currently market PACE loans would not collect the information necessary for creditors to make ability-to-repay determinations in accordance with the proposal.<sup>4</sup>

To the extent that the projects currently funded by PACE would not occur without PACE financing being available, and to the extent those projects would provide environmental benefits, the CFPB's proposed rule would reduce those environmental benefits. The CFPB considered the impacts of its proposed rule relative to the alternative of no action.<sup>5</sup>

PACE loans are authorized by State laws only for certain types of home improvement projects, which include solar panels, energy efficiency improvements, water efficiency improvements, HVAC improvements, and disaster resiliency improvements. Such projects might improve the environment by reducing water or electricity consumption and avoiding harmful emissions by generating electricity through renewable, non-polluting sources, although it is unknown whether these projects in fact provide these environmental benefits.<sup>6</sup>

Public comments from a PACE industry trade association expressed concerns that the proposed rule would have a significant adverse impact on the environment by reducing the

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<sup>4</sup> For a discussion of the potential impacts of the proposed rule, *see* 88 FR 30388 at 30417-28.

<sup>5</sup> The rulemaking on PACE financing is required under 15 U.S.C. 1639c(b)(3)(C). For purposes of this analysis, the CFPB analyzed a “no action” alternative to provide a benchmark for environmental effects.

<sup>6</sup> Other commenters on the proposed rule raised that potential energy savings estimates from PACE programs “are speculative and may not materialize.” Comments to The Consumer Financial Protection Bureau Regarding Proposed Rule for Residential Property Assessed Clean Energy Financing (Regulation Z), RIN National Consumer Law Center & National Housing Law Project, July 26, 2023, <https://www.regulations.gov/comment/CFPB-2023-0029-0101>.

environmental benefits associated with PACE financing, including benefits related to the reduction of water and energy consumption. Specifically, the commenter stated that all PACE projects to date (covering roughly 2010-2022) have created a total of 537MW of solar capacity, and over the lifetimes of the projects will reduce water consumption by 21 million gallons, reduce greenhouse gas emissions by 9.5 million metric tons, and reduce electricity consumption by 338 million kWh.<sup>7</sup>

The comment, as well as the referenced article and white paper, do not describe the methodology for estimating environmental benefits, and the CFPB believes the statistic on solar generation of 537 MW in particular is inconsistent with other data and significantly overstates the impact on energy and water consumption that could result from the proposed rule. Public data from California indicates that only about 170MW of solar generation have ever been installed in that State funded by PACE loans. Although PACE lending is also active in Florida, solar projects are much less common in that State, making up only 7 percent of projects funded between 2014 and 2019.<sup>8</sup> And the overall number of PACE projects in Florida is noticeably smaller than in California.<sup>9</sup>

Even taking the commenter's estimates at face value, and assuming the CFPB's rule would completely eliminate PACE financing (an outcome the CFPB does not expect to occur), this would not result in a significant impact on the human environment. For instance, focusing on greenhouse gas emissions, using the commenters' estimates, a generous quantification of the

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<sup>7</sup> See Comments on Residential Property Assessed Clean Energy Financing, RIN 3170-AA84, PACENation, July 26, 2023, <https://www.regulations.gov/comment/CFPB-2023-0029-0115>.

<sup>8</sup> CFPB, *Property Assessed Clean Energy (PACE) Financing and Consumer Financial Outcomes* at 14 (May 2023), [https://files.consumerfinance.gov/f/documents/cfpb\\_pace-rulemaking-report\\_2023-04.pdf](https://files.consumerfinance.gov/f/documents/cfpb_pace-rulemaking-report_2023-04.pdf) (CFPB PACE Report).

<sup>9</sup> *Id.* at 8.

rule's effect on greenhouse gas emissions would result in eliminating the reduction of an estimated 9.5 million metric tons of emissions over the lifetime of the PACE-funded projects. While the CFPB does not have data indicating the useful life of PACE financed projects, PACE loans are typically required to have terms that are shorter than the useful life of the underlying project, and the average term of a PACE loan is about 20 years.<sup>10</sup> To be conservative, the CFPB calculated the annual reduction in greenhouse gas emissions assuming a 20-year life, although the actual annual life of projects funded by PACE loans is surely longer.<sup>11</sup> Averaging 9.5 million metric tons over a 20-year period would represent 475,000 tons annually over 20 years. This would represent only 0.0075 percent of U.S. annual domestic greenhouse gas emissions.<sup>12</sup> Even compared just to greenhouse gas emissions in California and Florida, this represents only around 0.079 percent of annual greenhouse gas emissions.<sup>13</sup>

The commenter did not assign a monetary value to the claimed greenhouse gas emission reductions. One metric that federal agencies have used to assign monetary value to the climate change effects of incremental emissions of greenhouse gases is the social cost of greenhouse gas

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<sup>10</sup> *Id.* at 13.

<sup>11</sup> Because a calculation of annual benefits requires division over the useful life of the projects, the shorter the assumed project lifetime, the higher the amount of estimated annual benefits.

<sup>12</sup> See *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, EPA.gov (last updated Nov. 22, 2024), <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks#:~:text=Key%20findings%20from%20the%20latest,sequestration%20from%20the%20land%20sector>, (finding that in 2022, U.S. greenhouse gas emissions totaled 6,343 million metric tons of carbon dioxide equivalents).

<sup>13</sup> See *California Greenhouse Gas Emissions from 2000 to 2022: Trends of Emissions and Other Indicators*, [California Air Resources Board](https://www.arb.ca.gov/ghg-inventory-data) (Sept. 20, 2024), <https://www.arb.ca.gov/ghg-inventory-data> (reporting 2022 emissions for California as 371.1 million metric tons); *Energy-Related CO<sub>2</sub> Emission Data Tables*, U.S. Energy Information Admin. (Oct. 29, 2024), <https://www.eia.gov/environment/emissions/state/> (reporting 2022 CO<sub>2</sub> emissions (which may be less than total greenhouse gas emissions) for Florida of 231 million metric tons).

calculation.<sup>14</sup> A social cost of greenhouse gas calculation using a 2 percent discount rate estimates the cost of a 9.5 million metric ton increase in greenhouse gas emissions at around \$99 million annually over the 20-year life of the projects, compared to the approximately \$125.2 billion social cost estimate for annual Florida and California greenhouse gas emissions, and the approximately \$1.2 trillion social cost estimate of total annual domestic greenhouse gas emissions.<sup>15</sup>

The commenter's estimated benefits of PACE loans for energy and water consumption similarly represent a small fraction of state and national consumption. In terms of electricity consumption, averaging the commenter's 338 million kWh estimate over a 20-year period would represent 16.9 million kWh annually over 20 years. This would represent only 0.0035 percent of annual electricity generation in California and Florida combined<sup>16</sup> and 0.00042 percent of U.S. annual total domestic electricity consumption.<sup>17</sup> Likewise, with respect to water consumption, averaging the commenter's 21 million gallon estimate over a 20-year period would represent 1.05 million gallons per year. This represents 0.0000065 percent of combined annual California

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<sup>14</sup> See EPA Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances, EPA (Nov. 2023), [https://www.epa.gov/system/files/documents/2023-12/epa\\_scghg\\_2023\\_report\\_final.pdf](https://www.epa.gov/system/files/documents/2023-12/epa_scghg_2023_report_final.pdf) (“The [social cost of greenhouse gas] is the monetary value of the net harm to society from emitting a metric ton of that [greenhouse gas] into the atmosphere in a given year”).

<sup>15</sup> This analysis was performed using the Environmental Protection Agency's estimates from its 2023 report on the social cost of greenhouse gases. See EPA Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances, EPA (Nov. 2023), [https://www.epa.gov/system/files/documents/2023-12/epa\\_scghg\\_2023\\_report\\_final.pdf](https://www.epa.gov/system/files/documents/2023-12/epa_scghg_2023_report_final.pdf); *Calculating the Social Cost of Greenhouse Gases*, Institute for Policy Integrity, N.Y. University School of Law, <https://costofcarbon.org/calculator>.

<sup>16</sup> See U.S. Energy Information Admin., *State Electricity Profiles* (Nov. 6, 2024), <https://www.eia.gov/electricity/state/>, (estimating Florida's 2023 net annual electricity generation at 259,798,479 megawatt hours and California's 2023 net annual electricity generation at 216,628,794 megawatt hours).

<sup>17</sup> U.S. Energy Information Admin. *Electricity explained* (last updated Dec. 18, 2023), <https://www.eia.gov/energyexplained/electricity/use-of-electricity.php#:~:text=Electricity%20consumption%20in%20the%20United,important%20to%20the%20U.S.%20economy> (estimating annual electricity consumption in the United States at 4 trillion kWh a year in 2022).

and Florida water consumption based on 2015 estimates of those states' daily consumption,<sup>18</sup> and 0.00000089 percent of annual United States water consumption, which was last estimated in 2015 to be about 322 billion gallons per day, or 117.5 trillion gallons per year.<sup>19</sup>

Thus, even if the outcome of the proposed rule were to eliminate all the benefits claimed by this commenter, these impacts would be relatively small. With respect to the potentially affected environment, the CFPB has analyzed the significance of the proposed rule's potential effects in a national context, as well as in relation to the States with active PACE programs. With respect to the duration of the action, the CFPB analyzed the proposed rule's potential short-term effects and long-term effects in relation to the lifetime of the PACE projects. The CFPB has determined that the proposed rule will not have significant effects on public health and safety, and that the proposed rule would not have effects that would violate Federal, State, Tribal, or local law protecting the environment. Accordingly, the CFPB has determined that the proposed rule will not have significant effects on the human environment, including significant indirect or cumulative effects.

Moreover, as noted, the estimates from the commenter cited above very likely overstate the environmental harms of a rule that reduces PACE financing, for four reasons:

First, as discussed in the proposed rule, the CFPB does not expect its rule to completely eliminate PACE financing.<sup>20</sup> California implemented legislation in 2018 that required consideration of ability to pay and contained certain elements that were similar to the CFPB's

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<sup>18</sup> See U.S. Geological Survey, *Water use in the U.S., 2015*, <https://labs.waterdata.usgs.gov/visualizations/water-use-15/index.html#view=USA&category=publicsupply> (estimating 2015 water consumption in California at 28,759 million gallons of water per day, and in Florida at 15,285 million gallons of water per day).

<sup>19</sup> See U.S. Geological Survey, *Summary of Estimated Water Use in the United States in 2015* (June 2018), <https://pubs.usgs.gov/fs/2018/3035/fs20183035.pdf>.

<sup>20</sup> For a discussion of the potential impacts of the proposed rule, see 88 FR 30388 at 30417-28.

proposed ability-to-repay requirements, and while this reduced PACE volumes by around 50 percent, it did not eliminate PACE lending. Further, given that California already has requirements for PACE lenders to consider consumers' incomes before extending a loan, any reduction in loan volume in that State is likely to be more limited. And PACE financing loan volumes have declined over time from their peak in 2018,<sup>21</sup> such that future environmental impacts may be less than historical estimates.

Second, based on the limited information available in the white paper referenced through the commenter, those estimates seem to rely on engineering estimates of the potential benefits of the home improvements. Significant academic literature indicates that energy efficiency improvements frequently underperform engineering estimates in real world scenarios.<sup>22</sup> This may occur due to imperfect installation, imperfect maintenance, or rebound effects (that is, energy efficiency leading to increased consumption due to reducing the cost of consumption).

Third, the commenter's estimates assume that the projects funded by PACE financing would not be completed without PACE financing. In practice, consumers may find other forms of financing, or may pay in cash. Indeed, some evidence suggests this may happen frequently. The CFPB has documented that, based on public data from California, PACE borrowers seem to frequently repay their PACE loans early, with as many as 40 percent pre-paying.<sup>23</sup> Although consumers may be required to pay off their PACE loans in order to sell their property, this statistic suggests that many consumers may have had other sources of funds to cover their home

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<sup>21</sup> CFPB PACE Report at 50.

<sup>22</sup> See, e.g., Meredith Fowlie, Michael Greenstone & Catherine Wolfram, *Do Energy Efficient Investments Deliver? Evidence from the Weatherization Assistance Program*, 133 Q. J. of Econ. 3 (Aug. 2018).

<sup>23</sup> See 88 FR 30388 at 30421, table 1.



improvements, and thus would likely complete the project funded by the PACE loan even if PACE loans were not available. The CFPB also analyzed public data on solar installations in California for purposes of considering potential environmental effects of the proposed rule for this environmental assessment.<sup>24</sup> Solar projects were by far the most common type of project funded by PACE in California from 2014-2019. At the peak of PACE financing activity in California in 2017, about 6 percent of distributed solar generation projects in California were funded by PACE loans. However, when PACE loans declined in 2018 following California's ability-to-pay legislation, there was no noticeable drop in new solar installations, indicating that many solar projects funded by PACE loans would still have been completed without PACE being available. The CFPB also notes that by 2022, only a few dozen solar projects in California were funded by PACE loans each month.

### **Environmental Impacts of Alternatives to the Proposed Action**

As discussed above, the CFPB considered the impacts of its proposed rule relative to the alternative of no action. Under the no-action scenario, currently projected environmental impacts would not meaningfully change.

### **Agencies and Persons Consulted**

As part of the CFPB's PACE rulemaking, EGRRCPA section 307 requires that the CFPB "consult with State and local governments and bond-issuing authorities."<sup>25</sup> In consultation calls conducted in November 2024 in furtherance of this requirement, CFPB staff notified State and local governments and bond issuing authorities of the CFPB's intent to prepare this environmental assessment and finding of no significant impact, and shared the CFPB's

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<sup>24</sup> CFPB PACE Report, *supra* note 7 at 14-15; California Distributed Generation Statistics, [Californiadgstats.ca.gov](http://Californiadgstats.ca.gov).

<sup>25</sup> 15 U.S.C. 1639c(b)(3)(C)(iii)(II).

preliminary conclusion that the proposed rule would not have significant impacts on the environment. CFPB staff invited input from call participants on that preliminary conclusion but did not receive any. In addition, this environmental assessment responds to comments that the CFPB received on the NPRM suggesting that the CFPB conduct an analysis of the NPRM's effects on the environment.

## **II. Finding of No Significant Impact**

Based on its review of the proposed rule and consideration of comments, the CFPB has determined that the proposed rule, with the adjustments as finalized, will not significantly affect the quality of the human environment. No reasonably foreseeable significant environmental impacts are expected from the proposed rule. Therefore, the CFPB has determined that the preparation of an environmental impact statement is not required for the proposed action, and a finding of no significant impact is appropriate. This finding of no significant impact incorporates the environmental assessment set forth in this notice by reference.

**Rohit Chopra,**

*Director, Consumer Financial Protection Bureau.*