UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.

(Exact name of registrant as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization)

One Park Place, Suite 200 Annapolis, Maryland (Address of principal executive offices) 46-1347456 (I.R.S. Employer Identification No.)

> 21401 (Zip code)

2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan (Full title of the plan)

Steven Chuslo, Esq. Executive Vice President, Chief Legal Officer Hannon Armstrong Sustainable Infrastructure Capital, Inc. One Park Place, Suite 200 Annapolis, Maryland 21401 (410) 571-9860 (Name and address, including zip code, and telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, anon-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	\boxtimes	Accelerated filer	
Non-accelerated filer			
Smaller reporting company		Emerging growth company	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

At the 2022 Annual Meeting of Stockholders of Hannon Armstrong Sustainable Infrastructure Capital, Inc., a Maryland corporation (the "Company"), held on June 1, 2022, the stockholders of the Company approved the 2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan (the "Amended Plan"), which is an amendment and restatement of the 2013 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan (the "Plan"). The Amended Plan provides for grants of equity-based awards up to an aggregate of 7,500,000 shares of common stock, \$0.01 par value per share, of the Company ("common stock").

The Company previously registered shares of common stock for issuance under the Plan pursuant to Registration Statements onForm S-8, File Nos. 333-188070, 333-212913, and 333-230548 filed with the Securities and Exchange Commission (the "SEC") on April 23, 2013, August 4, 2016 and March 27, 2019, respectively (collectively, the "Prior Registration Statements"). The Company is filing this Registration Statement on Form S-8 to register 7,500,000 shares of common stock available for issuance under the Amended Plan.

In accordance with General Instruction E of Form S-8, the contents of the Prior Registration Statements are hereby incorporated by reference in this Registration Statement on Form S-8, except to the extent supplemented, amended or superseded by the information set forth herein.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents previously filed by Hannon Armstrong Sustainable Infrastructure Capital, Inc. (the "Company") with the SEC are incorporated by reference in this registration statement:

Document

Annual Report on Form 10-K (File No. 001-35877) Annual Report on Form 10-K/A (File No. 001-35877) Quarterly Report on Form 10-Q (File No. 001-35877)

Document

Current Report on Form 8-K (File No. 001-35877) Current Report on Form 8-K (File No. 001-35877)

Document

Definitive Proxy Statement on <u>Schedule 14A</u> (only with respect to information contained in such Definitive Proxy Statement that is incorporated by reference into Part III of our Annual Report on <u>Form 10-K</u> for the year ended December 31, 2021) (FileNo. 001-35877)

Document

Registration Statement on Form 8-A, or Form 8-A, as updated by Exhibit 4.2 to the Annual Report on Form 10-K for the year ended December 31, 2019, or Exhibit 4.2 (each containing a description of our common stock, \$0.01 par value per share) (File No. 001-35877)

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a posteffective amendment to this registration statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of filing of such documents.

Period

Year ended December 31, 2021 Year ended December 31, 2021 Quarter ended March 31, 2022

Filed February 11, 2022 March 2, 2022 April 8, 2022 April 15, 2022 June 2, 2022 June 7, 2022

Filed April 18, 2022

Filed

April 15, 2013 (Form 8-A) February 25, 2020 (Exhibit 4.2) Any statement contained in a document incorporated or deemed to be incorporated by reference in this registration statement shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained in this registration statement, or in any other subsequently filed document that also is or is deemed to be incorporated by reference in this registration statement, modifies or supersedes such prior statement. Any statement contained in this registration statement to be incorporated by reference in this registration statement modifies or supersedes such prior statement that is or is deemed to be incorporated by reference in this registration statement modifies or supersedes such prior statement. Any statement that is or is deemed to be incorporated by reference in this registration statement modifies or supersedes such prior statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 8. Exhibits.

Exhibit	
<u>number</u> 4.1*	Exhibit description Specimen Common Stock Certificate of Hannon Armstrong Sustainable Infrastructure Capital, Inc. (incorporated by reference to Exhibit 4.1 to the Registrant's Form S-11 (No. 333-186711), filed on April 12, 2013)
5.1+	Opinion of Clifford Chance US LLP (including consent of such firm)
23.1+	Consent of Clifford Chance US LLP (included in Exhibit 5.1)
23.2+	Consent of Ernst & Young LLP for Hannon Armstrong Sustainable Infrastructure Capital, Inc.
23.3+	Consent of Ernst & Young LLP for Vivant Solar Asset 3 HoldCo Parent, LLC
23.4+	Consent of Ernst & Young LLP for Rosie TargetCo LLC
23.5+	Consent of KPMG LLP for SunStrong Capital Holdings, LLC
23.6+	Consent of KPMG LLP for Rosie TargetCo LLC
24.1+	Power of Attorney (included on signature page)
00.1*	2022 Hennen Armetrong Systeinskle Infrastructure Conitel, Inc. Equity Incentive Plan (incomported by reference to Exhibit 10.1 to the

99.1* 2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K (No. 001-35877), filed on June 7, 2022)

* Incorporated by reference.

+ Filed herewith.

^{107+ &}lt;u>Filing Fee Table</u>

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S–8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Annapolis, in the State of Maryland, on June 14, 2022.

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.

By:	/s/	Jeffrey	А.	Liŗ	oson

Name: Jeffrey A. Lipson Title: Chief Financial Officer and Executive Vice President

POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Jeffrey W. Eckel and Jeffrey A. Lipson, and each of them, with full power to act without the other, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign this Registration Statement, and any and all amendments thereto (including post-effective amendments), and to file the same, with exhibits and schedules thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing necessary or desirable to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the date indicated.

Signatures		Title	Date		
By:	/s/ Jeffrey W. Eckel Jeffrey W. Eckel	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	June 14, 2022		
By:	/s/ Jeffrey A. Lipson Jeffrey A. Lipson	Chief Financial Officer, Chief Operating Officer and Executive Vice President (Principal Financial Officer)	June 14, 2022		
By:	/s/ Charles Melko Charles Melko	Chief Accounting Officer, Treasurer and Senior Vice President (Principal Accounting Officer)	June 14, 2022		
By:	/s/ Teresa M. Brenner Teresa M. Brenner	Director	June 14, 2022		
By:	/s/ Clarence D. Armbrister Clarence D. Armbrister	Director	June 14, 2022		
By:	/s/ Michael T. Eckhart Michael T. Eckhart	Director	June 14, 2022		

By:	/s/ Nancy C. Floyd Nancy C. Floyd	Director	June 14, 2022
By:	/s/ Charles M. O'Neil Charles M. O'Neil	Director	June 14, 2022
By:	/s/ Richard J. Osborne Richard J. Osborne	Director	June 14, 2022
By:	/s/ Steven G. Osgood Steven G. Osgood	Director	June 14, 2022

June 14, 2022

Hannon Armstrong Sustainable Infrastructure Capital, Inc. One Park Place, Suite 200 Annapolis, MD 21401

Ladies and Gentlemen:

We have acted as counsel to Hannon Armstrong Sustainable Infrastructure Capital, Inc. (the **'Company**') in connection with the offer and sale by the Company of 7,500,000 shares (the **''Shares**'') of its common stock, par value \$0.01 per share (the "Common Stock"), pursuant to its 2022 Equity Incentive Plan (the **''Plan**''). The Common Stock is being sold pursuant to the Company's Registration Statement on FormS-8 (the **''Registration Statement**'') under the Securities Act of 1933, as amended (the **''Securities Act**'').

In rendering the opinion expressed below, we have examined and relied upon originals or copies, certified or otherwise identified to our satisfaction, of such corporate records, documents, certificates and other instruments as in our judgment are necessary or appropriate. In examining all such documents, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us purporting to be originals, and the conformity to the respective originals of all documents submitted to us as certified, telecopied, photostatic or reproduced copies or in portable document format.

Based on the foregoing, and such other examination of law and fact as we have deemed necessary, we are of the opinion that the Shares have been duly and validly authorized and, when issued and sold in the manner contemplated by the Registration Statement and the Plan, will be legally issued, fully paid and nonassessable.

The foregoing opinion is based as to matters of law solely on the applicable provisions of the General Corporation Law of the State of Maryland, as currently in effect. We express no opinion as to other laws, statutes, ordinances, rules or regulations and we assume no responsibility for the applicability or effect of such laws, statutes, ordinances, rules or regulations of any other jurisdiction.

This letter has been prepared for your use in connection with the Registration Statement and is based upon the law as in effect and the facts known to us on the date hereof. We have not undertaken to advise you of any subsequent changes in the law or of any facts that hereafter may come to our attention.

We hereby consent to the filing of this opinion with the Securities and Exchange Commission (the **'SEC**'') as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the SEC thereunder.

Very truly yours,

/s/ Clifford Chance US LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (FormS-8) pertaining to the 2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan of our reports dated February 22, 2022, with respect to the consolidated financial statements of Hannon Armstrong Sustainable Infrastructure Capital, Inc., and the effectiveness of internal control over financial reporting of Hannon Armstrong Sustainable Infrastructure Capital, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Tysons, Virginia June 14, 2022

We consent to the incorporation by reference in the Registration Statement (FormS-8) pertaining to the 2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan of our report dated March 30, 2022, with respect to the consolidated financial statements of Vivint Solar Asset 3 HoldCo Parent, LLC, included in Hannon Armstrong Sustainable Infrastructure Capital, Inc.'s Annual Report (Form 10-K/A) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Salt Lake City, Utah June 14, 2022

We consent to the incorporation by reference in the Registration Statement (FormS-8) pertaining to the 2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan of our report dated March 29, 2022, with respect to the consolidated financial statements of Rosie TargetCo LLC and subsidiaries, included in Hannon Armstrong Sustainable Infrastructure Capital, Inc.'s Annual Report (Form 10-K/A) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania June 14, 2022

We consent to the incorporation by reference in this Registration Statement on FormS-8 pertaining to the 2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan of our report dated March 29, 2022, with respect to the consolidated financial statements of SunStrong Capital Holdings, LLC as of December 31, 2021 and 2020 and for each of the years in the three year period ended December 31, 2021, not included herein, which report appears in the December 31, 2021 annual report on Form 10-K/A of Hannon Armstrong Sustainable Infrastructure Capital, Inc.

/s/ KPMG LLP

San Francisco, California June 14, 2022

We consent to the incorporation by reference in this Registration Statement on FormS-8 pertaining to the 2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan of our report dated April 29, 2021, with respect to the consolidated financial statements of Rosie TargetCo LLC and subsidiaries, dated March 22, 2022, which report appears in the December 31, 2021 annual report on Form 10-K/A of Hannon Armstrong Sustainable Infrastructure Capital, Inc.

/s/ KPMG LLP

Philadelphia, Pennsylvania June 14, 2022

Calculation of Filing Fee Tables

Form S-8 (Form Type)

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC. (Exact Name of Registrant as Specified in its Charter)

Table 1. Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, \$0.01 par value per share	Other	7,500,000(1)(2)	\$35.705(3)	\$267,787,500	0.0000927	\$24,824
Total Offering Amounts					\$267,787,500		\$24,824
Total Fee Offsets					_		_
Net Fee Due							\$24,824

 Represents 7,500,000 shares of common stock, \$0.01 par value per share ("common stock"), of Hannon Armstrong Sustainable Infrastructure Capital, Inc. (the "Company") available for issuance under the 2022 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan (the "Plan").

(2) Pursuant to Rule 416 of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of common stock that become issuable under the Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of outstanding shares of common stock.

(3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and Rule 457(h) under the Securities Act. The offering price per share and aggregate offering price are based upon the average of the high and low prices per share of common stock as reported on the New York Stock Exchange on June 13, 2022, which was \$35.705 per share.