
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended **September 30, 2020**

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number **001-35877**

**HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL,
INC.**

(Exact name of registrant as specified in its charter)

Maryland
(State or other jurisdiction of
incorporation or organization)

46-1347456
(I.R.S. Employer
Identification No.)

1906 Towne Centre Blvd Suite 370
Annapolis, Maryland
(Address of principal executive offices)

21401
(Zip code)

(410) 571-9860

(Registrant's telephone number, including area code)

N/A

(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	HASI	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-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.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock as of the latest practicable date: 75,376,938 shares of common stock, par value \$0.01 per share, outstanding as of November 2, 2020 (which includes 367,390 shares of unvested restricted common stock).

FORWARD-LOOKING STATEMENTS

We make forward-looking statements in this Quarterly Report on Form 10-Q (“Form 10-Q”) within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) that are subject to risks and uncertainties. For these statements, we claim the protections of the safe harbor for forward-looking statements contained in such Sections. These forward-looking statements include information about possible or assumed future results of our business, financial condition, liquidity, results of operations, plans and objectives. When we use the words “believe,” “expect,” “anticipate,” “estimate,” “plan,” “continue,” “intend,” “should,” “may” or similar expressions, we intend to identify forward-looking statements.

Forward-looking statements are subject to significant risks and uncertainties. Investors are cautioned against placing undue reliance on such statements. Actual results may differ materially from those set forth in the forward-looking statements. Factors that could cause actual results to differ materially from those described in the forward-looking statements are contained in our Annual Report on Form 10-K for the year ended December 31, 2019, as amended by our Amendment No. 1 to our Annual Report on Form 10-K for the year ended December 31, 2019 (collectively, our “2019 Form 10-K”) that was filed with the U.S. Securities and Exchange Commission (the “SEC”), and this Form 10-Q and other periodic reports that we file with the SEC.

Other important factors that we think could cause our actual results to differ materially from expected results are summarized below, including the ongoing impact of the current outbreak of the novel coronavirus (“COVID-19”), on the U.S., regional and global economies, the U.S. sustainable infrastructure market and the broader financial markets. The current outbreak of COVID-19 has also impacted, and is likely to continue to impact, directly or indirectly, many of the other important factors below and the risks described in the Form 10-K and in our subsequent filings under the Exchange Act. Other factors besides those listed could also adversely affect us. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. In particular, it is difficult to fully assess the impact of COVID-19 at this time due to, among other factors, uncertainty regarding the severity and duration of the outbreak domestically and internationally, uncertainty regarding the effectiveness of federal, state and local governments’ efforts to contain the spread of COVID-19 and respond to its direct and indirect impact on the U.S. economy and economic activity.

Statements regarding the following subjects, among others, may be forward-looking:

- negative impacts from a continued spread of COVID-19, including on the U.S. or global economy or on our business, financial position or results of operations;
- our expected returns and performance of our investments;
- the state of government legislation, regulation and policies that support or enhance the economic feasibility of projects that reduce carbon emissions or increase resilience to climate change, which we refer to as climate change solutions, including energy efficiency and renewable energy projects and the general market demands for such projects;
- market trends in our industry, energy markets, commodity prices, interest rates, the debt and lending markets or the general economy;
- our business and investment strategy;
- availability of opportunities to invest in climate change solutions including energy efficiency and renewable energy projects and our ability to complete potential new opportunities in our pipeline;
- our relationships with originators, investors, market intermediaries and professional advisers;
- competition from other providers of capital;
- our or any other company’s projected operating results;
- actions and initiatives of the federal, state and local governments and changes to federal, state and local government policies, regulations, tax laws and rates and the execution and impact of these actions, initiatives and policies;
- the state of the U.S. economy generally or in specific geographic regions, states or municipalities, and economic trends;
- our ability to obtain and maintain financing arrangements on favorable terms, including securitizations;
- general volatility of the securities markets in which we participate;
- the credit quality of our assets;

- changes in the value of our assets, our portfolio of assets and our investment and underwriting process;
- the impact of weather conditions, natural disasters, accidents or equipment failures or other events that disrupt the operation of our investments or negatively impact the value of our assets;
- rates of default or decreased recovery rates on our assets;
- interest rate and maturity mismatches between our assets and any borrowings used to fund such assets;
- changes in interest rates and the market value of our assets and target assets;
- changes in commodity prices, including continued low natural gas prices;
- effects of hedging instruments on our assets or liabilities;
- the degree to which our hedging strategies may or may not protect us from risks, such as interest rate volatility;
- impact of and changes in accounting guidance;
- our ability to maintain our qualification as a real estate investment trust ("REIT") for U.S. federal income tax purposes;
- our ability to maintain our exemption from registration under the Investment Company Act of 1940, as amended (the "1940 Act");
- availability of and our ability to attract and retain qualified personnel;
- estimates relating to our ability to generate sufficient cash in the future to operate our business and to make distributions to our stockholders; and
- our understanding of our competition.

The risks included here are not exhaustive. Forward-looking statements are based on beliefs, assumptions and expectations as of the date of this Form 10-Q. Any forward-looking statement speaks only as of the date on which it is made. New risks and uncertainties arise over time, and it is not possible for us to predict those events or how they may affect us. Except as required by law, we are not obligated to, and do not intend to, update or revise any forward-looking statements after the date of this Form 10-Q, whether as a result of new information, future events or otherwise.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

(DOLLARS IN THOUSANDS, EXCEPT PER SHARE DATA)

(UNAUDITED)

	September 30, 2020 (unaudited)	December 31, 2019
Assets		
Cash and cash equivalents	\$ 881,487	\$ 6,208
Equity method investments	718,793	498,631
Government receivables	250,914	263,175
Commercial receivables, net of allowance of \$31 million and \$8 million, respectively	848,520	896,432
Real estate	359,948	362,265
Investments	51,638	74,530
Securitization assets	146,549	123,979
Other assets	86,649	162,054
Total Assets	\$ 3,344,498	\$ 2,387,274
Liabilities and Stockholders' Equity		
Liabilities:		
Accounts payable, accrued expenses and other	\$ 56,843	\$ 54,351
Credit facilities	22,565	31,199
Non-recourse debt (secured by assets of \$724 million and \$921 million, respectively)	599,958	700,225
Senior unsecured notes	1,278,844	512,153
Convertible notes	288,551	149,434
Total Liabilities	2,246,761	1,447,362
Stockholders' Equity:		
Preferred stock, par value \$0.01 per share, 50,000,000 shares authorized, no shares issued and outstanding	—	—
Common stock, par value \$0.01 per share, 450,000,000 shares authorized, 74,252,973 and 66,338,120 shares issued and outstanding, respectively	743	663
Additional paid in capital	1,282,744	1,102,303
Accumulated deficit	(202,914)	(169,786)
Accumulated other comprehensive income (loss)	11,474	3,300
Non-controlling interest	5,690	3,432
Total Stockholders' Equity	1,097,737	939,912
Total Liabilities and Stockholders' Equity	\$ 3,344,498	\$ 2,387,274

See accompanying notes.

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(DOLLARS IN THOUSANDS, EXCEPT PER SHARE DATA)
(UNAUDITED)

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenue				
Interest income	\$ 23,508	\$ 19,322	\$ 71,046	\$ 54,270
Rental income	6,469	6,469	19,408	19,415
Gain on sale of receivables and investments	13,628	7,713	34,449	16,718
Fee income	4,984	5,338	13,115	12,850
Total revenue	48,589	38,842	138,018	103,253
Expenses				
Interest expense	26,085	16,561	65,884	46,861
Provision for loss on receivables	2,458	8,027	5,629	8,027
Compensation and benefits	9,012	7,193	27,223	21,281
General and administrative	3,918	3,737	11,181	10,818
Total expenses	41,473	35,518	109,917	86,987
Income before equity method investments	7,116	3,324	28,101	16,266
Income (loss) from equity method investments	16,506	5,984	32,505	18,114
Income (loss) before income taxes	23,622	9,308	60,606	34,380
Income tax (expense) benefit	(2,345)	(132)	(2,860)	1,298
Net income (loss)	\$ 21,277	\$ 9,176	\$ 57,746	\$ 35,678
Net income (loss) attributable to non-controlling interest holders	102	74	255	191
Net income (loss) attributable to controlling stockholders	\$ 21,175	\$ 9,102	\$ 57,491	\$ 35,487
Basic earnings (loss) per common share	\$ 0.28	\$ 0.14	\$ 0.80	\$ 0.55
Diluted earnings (loss) per common share	\$ 0.28	\$ 0.13	\$ 0.78	\$ 0.54
Weighted average common shares outstanding—basic	74,012,788	64,922,325	71,376,004	63,492,884
Weighted average common shares outstanding—diluted	76,131,252	65,630,711	72,644,626	64,147,835

See accompanying notes.

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(DOLLARS IN THOUSANDS)
(UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Net income (loss)	\$ 21,277	\$ 9,176	\$ 57,746	\$ 35,678
Unrealized gain (loss) on available-for-sale securities, net of tax benefit (provision) of \$0.0 million and \$(1.1) million for the three and nine months ended 2020, and \$0.1 million and \$0.2 million for the three and nine months ended 2019, respectively	872	10,289	12,280	16,884
Unrealized gain (loss) on interest rate swaps, net of tax benefit (provision) of \$0.3 million and \$1.3 million for the three and nine months ended 2020, respectively and \$0.0 million in each of the three and nine months ended 2019	990	(2,483)	(4,071)	(6,415)
Comprehensive income (loss)	23,139	16,982	65,955	46,147
Less: Comprehensive income (loss) attributable to non-controlling interest holders	110	101	289	230
Comprehensive income (loss) attributable to controlling stockholders	\$ 23,029	\$ 16,881	\$ 65,666	\$ 45,917

See accompanying notes.

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(AMOUNTS IN THOUSANDS)
(UNAUDITED)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Non-controlling interests	Total
	Shares	Amount					
Balance at June 30, 2020	73,319	\$ 733	\$ 1,250,976	\$ (198,719)	\$ 9,619	\$ 5,355	\$ 1,067,964
Net income (loss)	—	—	—	21,175	—	102	21,277
Unrealized gain (loss) on available-for-sale securities	—	—	—	—	864	8	872
Unrealized gain (loss) on interest rate swaps	—	—	—	—	991	(1)	990
Issued shares of common stock	875	10	29,238	—	—	—	29,248
Equity-based compensation	—	—	1,617	—	—	1,285	2,902
Other	59	—	913	—	—	(859)	54
Dividends and distributions	—	—	—	(25,370)	—	(200)	(25,570)
Balance at September 30, 2020	74,253	\$ 743	\$ 1,282,744	\$ (202,914)	\$ 11,474	\$ 5,690	\$ 1,097,737
Balance at June 30, 2019	64,913	\$ 649	\$ 1,060,086	\$ (180,217)	\$ 968	\$ 3,258	\$ 884,744
Net income (loss)	—	—	—	9,102	—	74	9,176
Unrealized gain (loss) on available-for-sale securities	—	—	—	—	10,250	39	10,289
Unrealized gain (loss) on interest rate swaps	—	—	—	—	(2,472)	(11)	(2,483)
Issued shares of common stock	—	—	82	—	—	—	82
Equity-based compensation	—	—	3,023	—	—	13	3,036
Issuance (repurchase) of vested equity-based compensation shares	8	—	(28)	—	—	—	(28)
Other	4	—	(61)	—	—	(43)	(104)
Dividends and distributions	—	—	—	(22,006)	—	(163)	(22,169)
Balance at September 30, 2019	64,925	\$ 649	\$ 1,063,102	\$ (193,121)	\$ 8,746	\$ 3,167	\$ 882,543

See accompanying notes.

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Non-controlling interests	Total
	Shares	Amount					
Balance at December 31, 2019	66,338	\$ 663	\$ 1,102,303	\$ (169,786)	\$ 3,300	\$ 3,432	\$ 939,912
Net income (loss)	—	—	—	57,491	—	255	57,746
Adoption of ASU 2016-13, net of tax effect	—	—	—	(14,031)	—	(74)	(14,105)
Unrealized gain (loss) on available-for-sale securities	—	—	—	—	12,222	58	12,280
Unrealized gain (loss) on interest rate swaps	—	—	—	—	(4,048)	(23)	(4,071)
Issued shares of common stock	7,319	75	188,723	—	—	—	188,798
Equity-based compensation	—	—	8,098	—	—	3,543	11,641
Issuance (repurchase) of vested equity-based compensation shares	537	5	(17,293)	—	—	—	(17,288)
Other	59	—	913	—	—	(860)	53
Dividends and distributions	—	—	—	(76,588)	—	(641)	(77,229)
Balance at September 30, 2020	74,253	\$ 743	\$ 1,282,744	\$ (202,914)	\$ 11,474	\$ 5,690	\$ 1,097,737
Balance at December 31, 2018	60,510	\$ 605	\$ 965,384	\$ (163,205)	\$ (1,684)	\$ 3,423	\$ 804,523
Net income (loss)	—	—	—	35,487	—	191	35,678
Unrealized gain (loss) on available-for-sale securities	—	—	—	—	16,817	67	16,884
Unrealized gain (loss) on interest rate swaps	—	—	—	—	(6,387)	(28)	(6,415)
Issued shares of common stock	3,994	40	97,226	—	—	—	97,266
Equity-based compensation	—	—	9,573	—	—	42	9,615
Issuance (repurchase) of vested equity-based compensation shares	417	4	(9,020)	—	—	—	(9,016)
Other	4	—	(61)	—	—	(43)	(104)
Dividends and distributions	—	—	—	(65,403)	—	(485)	(65,888)
Balance at September 30, 2019	64,925	\$ 649	\$ 1,063,102	\$ (193,121)	\$ 8,746	\$ 3,167	\$ 882,543

See accompanying notes.

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(DOLLARS IN THOUSANDS)
(UNAUDITED)

	Nine Months Ended September 30,	
	2020	2019
Cash flows from operating activities		
Net income (loss)	\$ 57,746	\$ 35,678
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Provision for loss on receivables	5,629	8,027
Depreciation and amortization	2,685	2,693
Amortization of financing costs	5,824	5,073
Equity-based compensation	11,615	10,385
Equity method investments	14,024	3,695
Non-cash gain on securitization	(36,866)	(18,575)
Gain on sale of receivables and investments	8,671	3,140
Changes in accounts payable and accrued expenses	5,906	(4,804)
Other	(23,372)	(13,726)
Net cash provided by (used in) operating activities	<u>51,862</u>	<u>31,586</u>
Cash flows from investing activities		
Equity method investments	(322,948)	(48,301)
Equity method investment distributions received	90,920	53,485
Proceeds from sales of equity method investments	—	8,433
Purchases of and investments in receivables	(92,232)	(274,472)
Principal collections from receivables	94,780	48,900
Proceeds from sales of receivables	52,329	134,932
Purchases of investments	(22,777)	(22,242)
Principal collections from investments	1,981	5,432
Proceeds from sales of investments and securitization assets	58,018	90,993
Funding of escrow accounts	(7,783)	(28,672)
Withdrawal from escrow accounts	6,300	29,156
Other	3,200	2,891
Net cash provided by (used in) investing activities	<u>(138,212)</u>	<u>535</u>
Cash flows from financing activities		
Proceeds from credit facilities	126,000	101,500
Principal payments on credit facilities	(134,594)	(321,869)
Proceeds from issuance of non-recourse debt	15,938	34,988
Principal payments on non-recourse debt	(118,623)	(180,708)
Proceeds from issuance of senior unsecured notes	771,250	507,313
Proceeds from issuance of convertible notes	143,750	—
Payments on deferred funding obligations	—	(18,791)
Net proceeds of common stock issuances	188,197	96,648
Payments of dividends and distributions	(74,295)	(64,239)
Withholdings on employee share vesting	(17,287)	(9,015)
Other	(15,005)	(8,304)
Net cash provided by (used in) financing activities	<u>885,331</u>	<u>137,523</u>
Increase (decrease) in cash, cash equivalents, and restricted cash	<u>798,981</u>	<u>169,644</u>
Cash, cash equivalents, and restricted cash at beginning of period	<u>106,586</u>	<u>59,353</u>
Cash, cash equivalents, and restricted cash at end of period	\$ 905,567	\$ 228,997
Interest paid	\$ 57,310	\$ 39,884
Non-cash changes in deferred funding obligations and non-recourse debt (financing activity)	—	(78,008)
Non-cash changes in receivables and investments (investing activity)	—	59,979
Non-cash changes in residual assets (investing activity)	(38,081)	(21,746)
Non-cash changes in escrow accounts (investing activity)	—	18,029

See accompanying notes.

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)
September 30, 2020

1. The Company

Hannon Armstrong Sustainable Infrastructure Capital, Inc. (the “Company”) focuses on making investments in climate change solutions by providing capital to the leading companies in the energy efficiency, renewable energy and other sustainable infrastructure markets. Our goal is to generate attractive returns from a diversified portfolio of projects with long-term and predictable cash flows from proven technologies that reduce carbon emissions or increase resilience to climate change.

The Company and its subsidiaries are hereafter referred to as “we,” “us,” or “our.” Our investments take various forms, including equity, joint ventures, lending or other financing transactions, as well as real estate ownership and typically benefit from contractually committed high credit quality obligors. We also generate on-going fees through gain-on-sale securitization transactions, advisory services and asset management. We refer to the income producing assets that we hold on our balance sheet as our “Portfolio.” Our Portfolio may include:

- Equity investments in either preferred or common structures in unconsolidated entities;
- Government and commercial receivables, such as loans for renewable energy and energy efficiency projects;
- Real estate, such as land or other assets leased for use by sustainable infrastructure projects typically under long-term leases; and
- Investments in debt securities of renewable energy or energy efficiency projects.

We finance our business through cash on hand, borrowings under credit facilities and debt transactions, asset-backed securitization transactions and equity issuances. We also generate fee income through securitizations and syndications, by providing broker/dealer services and by managing and servicing assets owned by third parties. Some of our subsidiaries are special purpose entities that are formed for specific operations associated with investing in sustainable infrastructure receivables for specific long-term contracts.

Our common stock is listed on the New York Stock Exchange (“NYSE”) under the symbol “HASI.” We have qualified as a real estate investment trust (“REIT”) and also intend to continue to operate our business in a manner that will maintain our exemption from registration as an investment company under the 1940 Act, as amended. We operate our business through, and serve as the sole general partner of, our operating partnership subsidiary, Hannon Armstrong Sustainable Infrastructure, L.P., (the “Operating Partnership”), which was formed to acquire and directly or indirectly own our assets.

2. Summary of Significant Accounting Policies

Basis of Presentation

The preparation of financial statements in accordance with U.S. generally accepted accounting principles (“GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates and such differences could be material. These financial statements have been prepared in accordance with the instructions to Form 10-Q and should be read in conjunction with the consolidated financial statements and notes thereto included in our annual report on Form 10-K for the year ended December 31, 2019, as filed with the SEC. In the opinion of management, all adjustments necessary to present fairly our financial position, results of operations and cash flows have been included. Our results of operations for the three and nine-month periods ended September 30, 2020 and 2019, are not necessarily indicative of the results to be expected for the full year or any other future period. Certain information and footnote disclosures normally included in our annual consolidated financial statements have been condensed or omitted. Certain amounts in the prior years have been reclassified to conform to the current year presentation.

The consolidated financial statements include our accounts and controlled subsidiaries, including the Operating Partnership. All material intercompany transactions and balances have been eliminated in consolidation.

Following the guidance for non-controlling interests in Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 810, *Consolidation* (“ASC 810”), references in this report to our earnings per share and our net

income and stockholders' equity attributable to common stockholders do not include amounts attributable to non-controlling interests.

Consolidation

We account for our investments in entities that are considered voting interest entities or variable interest entities ("VIEs") under ASC 810 and assess whether we should consolidate these entities on an ongoing basis. We have established various special purpose entities or securitization trusts for the purpose of securitizing certain assets which are not consolidated in our financial statements as described below in Securitization of Financial Assets.

Since we have assessed that we have power over and receive the benefits from those special purpose entities that are formed for the purpose of holding our government and commercial receivables and investments on our balance sheet, we have concluded we are the primary beneficiary and should consolidate these entities under the provisions of ASC 810. We also have certain subsidiaries we deem to be voting interest entities that we control through our ownership of voting interests and accordingly consolidate.

Certain of our equity method investments were determined to be interests in VIEs in which we are not the primary beneficiary, as we do not direct the significant activities of these entities, and thus we account for those investments as Equity Method Investments as discussed below. Our maximum exposure to loss through these investments is limited to their recorded values. However, we may provide guarantees of certain obligations of these VIEs. Certain other equity method investments have been assessed to be voting interest entities as we exert significant influence through our ownership of voting interests, and accordingly we do not consolidate.

Equity Method Investments

We have made equity investments in various renewable energy and energy efficiency projects. These investments are typically owned in holding companies (using limited liability companies ("LLCs") taxed as partnerships) where we partner with either the operator of the project or other institutional investors. We share in the cash flows, income, and tax attributes according to a negotiated schedule (which typically does not correspond with our ownership percentages). Investors, if any, in a preferred return position typically receive a stated preferred return consisting of a priority distribution of all or a portion of the project's cash flows, and in some cases, tax attributes. Once the stated return, if applicable, is achieved, the partnership "flips" and the operator of the project along with any other common equity investors receive a larger portion of the cash flows, with the previously preferred investors retaining an on-going residual interest.

Our equity investments in renewable energy or energy efficiency projects are accounted for under the equity method of accounting. Under the equity method of accounting, the carrying value of these equity method investments is determined based on amounts we invested, adjusted for the equity in earnings or losses of the investee allocated based on the LLC agreement, less distributions received. For the LLC agreements which contain preferences with regard to cash flows from operations, capital events and liquidation, we reflect our share of profits and losses by determining the difference between our claim on the investee's book value at the beginning and the end of the period, which is adjusted for distributions received and contributions made. This claim is calculated as the amount we would receive if the investee were to liquidate all of its assets at the recorded amounts determined in accordance with GAAP and distribute the resulting cash to creditors and investors in accordance with their respective priorities. This method is referred to as the hypothetical liquidation at book value method ("HLBV"). Any difference between the amount of our investment and the amount of underlying equity in net assets is generally amortized over the life of the assets and liabilities to which the difference relates. Cash distributions received from these equity method investments are classified as operating activities to the extent of cumulative HLBV earnings in our consolidated statements of cash flows. Our initial investment and additional cash distributions beyond that which are classified as operating activities are classified as investing activities in our consolidated statements of cash flows. We typically recognize earnings one quarter in arrears for certain of these investments to allow for the receipt of financial information.

We evaluate on a quarterly basis whether our investments accounted for using the equity method have an other than temporary impairment ("OTTI"). An OTTI occurs when the estimated fair value of an investment is below the carrying value and the difference is determined to not be recoverable. This evaluation requires significant judgment regarding, but not limited to, the severity and duration of the impairment; the ability and intent to hold the securities until recovery; financial condition, liquidity, and near-term prospects of the issuer; specific events; and other factors.

Government and Commercial Receivables

Government and commercial receivables ("receivables") include project loans and receivables. These receivables are separately presented in our balance sheet to illustrate the differing nature of the credit risk related to these assets. Unless otherwise noted, we generally have the ability and intent to hold our receivables for the foreseeable future and thus they are classified as held for investment. Our ability and intent to hold certain receivables may change from time to time depending on a number of factors including economic, liquidity and capital market conditions. At inception of the arrangement, the carrying value of receivables held for investment represents the present value of the note, lease or other payments, net of any unearned

fee income, which is recognized as income over the term of the note or lease using the effective interest method. Receivables that are held for investment are carried at amortized cost, net of any unamortized acquisition premiums or discounts and include origination and acquisition costs, as applicable. Our initial investment and principal repayments of these receivables are classified as investing activities and the interest collected is classified as operating activities in our consolidated statements of cash flows. Receivables that we intend to sell in the short-term are classified as held-for-sale and are carried at the lower of amortized cost or fair value on our balance sheet. The purchases and proceeds from receivables that we intend to sell at origination are classified as operating activities in our consolidated statements of cash flows. Interest collected is classified as an operating activity in our consolidated statements of cash flows. Certain of our receivables may include the ability to defer required interest payments in exchange for increasing the receivable balance at the borrower's option. We generally accrue this paid-in-kind ("PIK") interest when collection is expected, and cease accruing PIK interest if there is insufficient value to support the accrual or we expect that any portion of the principal or interest due is not collectible.

We evaluate our receivables for an allowance as determined under ASC Topic 326 *Financial Instruments- Credit Losses* ("Topic 326") and for our internally derived asset performance categories included in Note 6 on at least a quarterly basis and more frequently when economic or other conditions warrant such an evaluation. When a receivable becomes 90 days or more past due, and if we otherwise do not expect the debtor to be able to service all of its debt or other obligations, we will generally consider the receivable delinquent or impaired and place the receivable on non-accrual status and cease recognizing income from that receivable until the borrower has demonstrated the ability and intent to pay contractual amounts due. If a receivable's status significantly improves regarding the debtor's ability to service the debt or other obligations, we will remove it from non-accrual status.

Prior to January 1, 2020, a receivable was also considered impaired as of the date when, based on current information and events, it was determined that it was probable that we would be unable to collect all amounts due in accordance with the original contracted terms. Many of our receivables are secured by energy efficiency and renewable energy infrastructure projects. Accordingly, we evaluated the extent and impact of any credit deterioration associated with the performance and value of the underlying project, as well as the financial and operating capability of the borrower, its sponsors or the obligor as well as any guarantors. If a receivable was impaired, we determined if a specific allowance should be recorded and recorded such allowance if the present value of expected future cash flows discounted at the receivable's contractual effective rate was less than its carrying value. This estimate of cash flows also considered the estimated fair market value of the collateral less estimated selling costs if repayment was expected from the collateral.

Beginning January 1, 2020, we determine our allowance based on the current expectation of credit losses over the contractual life of our receivables as required by Topic 326. We use a variety of methods in developing our allowance including discounted cash flow analysis and probability-of-default/loss given default ("PD/LGD") methods. In developing our estimates, we consider our historical experience with our and similar assets in addition to our view of both current conditions and what we expect to occur within a period of time for which we can develop reasonable and supportable forecasts, typically two years. For periods following the reasonable and supportable forecast period, we revert to historical information when developing assumptions used in our estimates. In developing our forecasts, we consider a number of qualitative and quantitative factors in our assessment, including a project's operating results, loan-to-value ratio, any cash reserves, the ability of expected cash from operations to cover the cash flow requirements currently and into the future, key terms of the transaction, the ability of the borrower to refinance the transaction, other credit support from the sponsor or guarantor and the project's collateral value. In addition, we consider the overall economic environment, the sustainable infrastructure sector, the effect of local, industry, and broader economic factors such as unemployment rates and power prices, the impact of any variation in weather and the historical and anticipated trends in interest rates, defaults and loss severities for similar transactions. For those assets where we record our allowance using a discounted cash flow method, we have elected to record the change in allowance due solely to the passage of time through the provision for loss on receivables in our income statement. For assets where the obligor is a publicly rated entity, we consider the published historical performance of entities with similar ratings in developing our estimate of an allowance, making adjustments determined by management to be appropriate during the reasonable and supportable forecast period. We have made certain loan commitments that are within the scope of Topic 326. When estimating an allowance for these loan commitments we consider the probability of certain amounts to be funded and apply either a discounted cash flow or PD/LGD methodology as described above. We charge off receivables against the allowance, if any, when we determine the unpaid principal balance is uncollectible, net of recovered amounts. Any provision we record for an allowance is a non-cash reconciling item to cash from operating activities in our consolidated statements of cash flows.

Real Estate

Real estate consists of land or other real estate and its related lease intangibles, net of any amortization. Our real estate is generally leased to tenants on a triple net lease basis, whereby the tenant is responsible for all operating expenses relating to the property, generally including property taxes, insurance, maintenance, repairs and capital expenditures. Certain real estate transactions may be characterized as "failed sale-leaseback" transactions as defined under ASC Topic 842 ("Topic

842"), *Leases*, and thus are accounted for similarly to our Commercial Receivables as described above in Government and Commercial Receivables.

For our other real estate lease transactions that are classified as operating leases, the scheduled rental revenue typically varies during the lease term and thus rental income is recognized on a straight-line basis, unless there is considerable risk as to collectability, so as to produce a constant periodic rent over the term of the lease. Accrued rental income is the aggregate difference between the scheduled rents which vary during the lease term and the income recognized on a straight-line basis and is recorded in other assets. Expenses, if any, related to the ongoing operation of leases where we are the lessor, are charged to operations as incurred. Our initial investment is classified as investing activities and income collected for rental income is classified as operating activities in our consolidated statements of cash flows.

When our real estate transactions are treated as an asset acquisition with an operating lease, we typically record our real estate purchases at cost, including acquisition and closing costs, which is allocated to each tangible and intangible asset acquired on a relative fair value basis.

The fair value of the tangible assets of an acquired leased property is determined by valuing the property as if it were vacant, and the "as-if-vacant" value is then allocated to land, building and tenant improvements, if any, based on the determination of the fair values of these assets. The as-if-vacant fair value of a property is typically determined by management based on appraisals by a qualified appraiser. In determining the fair value of the identified intangibles of an acquired property, above-market and below-market in-place lease values are valued based on the present value (using an interest rate which reflects the risks associated with the leases acquired) of the difference between (i) the contractual amounts to be paid pursuant to the in-place leases, and (ii) management's estimate of fair market lease rates for the corresponding in-place leases, measured over a period equal to the remaining term of the lease, including renewal periods reasonably certain of being exercised by the lessee.

The capitalized off-market lease values are amortized as an adjustment of rental income over the term used to value the intangible. We also record, as appropriate, an intangible asset for in-place leases. The value of the leases in place at the time of the transaction is equal to the potential income lost if the leases were not in place. The amortization of this intangible occurs over the initial term unless management believes that it is reasonably certain that the tenant would exercise the renewal option, in which case the amortization would extend through the renewal period. If a lease were to be terminated, all unamortized amounts relating to that lease would be written off.

Investments

Investments are debt securities that meet the criteria of ASC 320, *Investments-Debt and Equity Securities*. We have designated our debt securities as available-for-sale and carry these securities at fair value on our balance sheet. Unrealized gains and losses, to the extent not considered to be credit related, on available-for-sale debt securities are recorded as a component of accumulated other comprehensive income ("AOCI") in equity on our balance sheet. When a security is sold, we reclassify the AOCI to earnings based on specific identification. Our initial investment and principal repayments of these investments are classified as investing activities and the interest collected is classified as operating activities in our consolidated statements of cash flows.

We evaluate our investments for impairment on at least a quarterly basis, and more frequently when economic or market conditions warrant such an evaluation. Our impairment assessment is a subjective process requiring the use of judgments and assumptions. Accordingly, we regularly evaluate the extent and impact of any credit deterioration associated with the financial and operating performance and value of the underlying project. We consider several qualitative and quantitative factors in our assessment. The primary factor in our assessment is the current fair value of the security, while other factors include changes in the credit rating, performance of the underlying project, key terms of the transaction, the value of any collateral and any support provided by the sponsor or guarantor.

To the extent that we have identified an impairment for a security, intend to hold the investment to maturity, and do not expect that we will be required to sell the security prior to recovery of the amortized cost basis, we will recognize only the credit component of the unrealized loss in earnings by recording an allowance against the amortized cost of the asset as required by Topic 326. We determine the credit component using the difference between the security's amortized cost basis and the present value of its expected future cash flows, discounted using the effective interest method or its estimated collateral value. Any remaining unrealized loss due to factors other than credit is recorded in AOCI.

To the extent we hold investments with a fair value less than the amortized cost and we have made the decision to sell the security or it is more likely than not that we will be required to sell the security prior to recovery of its amortized cost basis, we recognize the entire portion of the impairment in earnings.

Premiums or discounts on investment securities are amortized or accreted into interest income using the effective interest method.

Securitization of Financial Assets

We have established various special purpose entities or securitization trusts for the purpose of securitizing certain financial assets. We determined that the trusts used in securitizations are VIEs, as defined in ASC 810. When we conclude that we are not the primary beneficiary of certain trusts because we do not have power over those trusts' significant activities, we do not consolidate the trust. We typically serve as primary or master servicer of these trusts; however, as the servicer, we do not have the power to make significant decisions impacting the performance of the trusts.

We account for transfers of financial assets to these securitization trusts as sales pursuant to ASC 860, *Transfers and Servicing* ("ASC 860"), when we have concluded the transferred assets have been isolated from the transferor (i.e., put presumptively beyond the reach of the transferor and its creditors, even in bankruptcy or other receivership) and we have surrendered control over the transferred assets. We treat those trusts where we are unable to conclude that we have been isolated from the securitized financial assets as secured borrowings, retaining the assets on our balance sheet and recording the amounts due to the trust investor as non-recourse debt.

For transfers treated as sales under ASC 860, we have received true-sale-at-law and non-consolidation legal opinions for all of our securitization trust structures that support our conclusion regarding the transferred financial assets. When we sell financial assets in securitizations, we generally retain interests in the form of servicing rights and residual assets, which we refer to as securitization assets.

Gain or loss on the sale of financial assets is calculated based on the excess of the proceeds received from the securitization (less any transaction costs) plus any retained interests obtained over the cost basis of the assets sold. For retained interests, we generally estimate fair value based on the present value of future expected cash flows using our best estimates of the key assumptions of anticipated losses, prepayment rates, and current market discount rates commensurate with the risks involved. Cash flows related to our securitizations at origination are classified as operating activities in our consolidated statements of cash flows.

We initially account for all separately recognized servicing assets and servicing liabilities at fair value and subsequently measure such servicing assets and liabilities using the amortization method. Servicing assets and liabilities are amortized in proportion to, and over the period of, estimated net servicing income with servicing income recognized as earned. We assess servicing assets for impairment at each reporting date. If the amortized cost of servicing assets is greater than the estimated fair value, we will recognize an impairment in net income.

Our other retained interest in securitized assets, the residual assets, are accounted for similarly to available-for-sale debt securities and carried at fair value. Our residual assets are evaluated for impairment on a quarterly basis. Income related to the residual assets is recognized using the effective interest rate method and included in fee income in the income statement. If there is a change in the expected cash flows related to the residual assets, we will assess whether the asset is impaired and will calculate a new yield based on the current amortized cost of the residual assets and the revised expected cash flows. This yield is used prospectively to recognize our income related to these assets.

Cash and Cash Equivalents

Cash and cash equivalents include short-term government securities, certificates of deposit and money market funds, all of which had an original maturity of three months or less at the date of purchase. These securities are carried at their purchase price, which approximates fair value.

Restricted Cash

Restricted cash includes cash and cash equivalents set aside with certain lenders primarily to support obligations outstanding as of the balance sheet dates. Restricted cash is reported as part of other assets in the consolidated balance sheets. Refer to Note 3 for disclosure of the balances of restricted cash included in other assets.

Convertible Notes

We have issued convertible senior notes that are accounted for in accordance with ASC 470-20, *Debt with Conversion and Other Options*, and ASC 815, *Derivatives and Hedging* ("ASC 815"). Under ASC 815, issuers of certain convertible debt instruments are generally required to separately account for the conversion option of the convertible debt instrument as either a derivative or equity, unless it meets the scope exemption for contracts indexed to, and settled in, an issuer's own equity. Since this conversion option is both indexed to our equity and can only be settled in our common stock, we have met the scope exemption, and therefore, we are not separately accounting for the embedded conversion option. The initial issuance and any principal repayments are classified as financing activities and interest payments are classified as operating activities in our consolidated statements of cash flows.

Income Taxes

We elected and qualified to be taxed as a REIT for U.S. federal income tax purposes, commencing with our taxable year ended December 31, 2013. We also have taxable REIT subsidiaries ("TRS") which are taxed separately, and which will generally be subject to U.S. federal, state, and local income taxes as well as taxes of foreign jurisdictions, if any. To qualify as a REIT, we must meet on an ongoing basis several organizational and operational requirements, including a requirement that we currently distribute at least 90% of our REIT's net taxable income before dividends paid, excluding capital gains, to our stockholders. As a REIT, we are not subject to U.S. federal corporate income tax on that portion of net income that is currently distributed to our owners.

We account for income taxes under ASC 740, *Income Taxes* ("ASC 740") for our TRS using the asset and liability method. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to the differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities from a change in tax rates is recognized in earnings in the period when the new rate is enacted. We evaluate any deferred tax assets for valuation allowances based on an assessment of available evidence including sources of taxable income, prior years taxable income, any existing taxable temporary differences and our future investment and business plans that may give rise to taxable income. We treat any tax credits we receive from our equity investments in renewable energy projects as reductions of federal income taxes of the year in which the credit arises. Any deferred tax impacts resulting from transfers of assets to or from our TRS are recorded as an adjustment to additional paid-in capital, as it is a transfer amongst entities under common control.

We apply ASC 740 with respect to how uncertain tax positions should be recognized, measured, presented, and disclosed in the financial statements. This guidance requires the accounting and disclosure of tax positions taken or expected to be taken in the course of preparing our tax returns to determine whether the tax positions are "more likely than not" to be sustained by the applicable tax authority. We are required to analyze all open tax years, as defined by the statute of limitations, for all major jurisdictions, which includes U.S. federal and certain states.

Equity-Based Compensation

In 2013, we adopted the 2013 Hannon Armstrong Sustainable Infrastructure Capital, Inc. Equity Incentive Plan (as amended, the "2013 Plan"), which provides for grants of stock options, stock appreciation rights, restricted stock units, shares of restricted common stock, phantom shares, dividend equivalent rights, long-term incentive-plan units ("LTIP units") and other restricted limited partnership units issued by our Operating Partnership and other equity-based awards. From time to time, we may grant equity or equity-based awards as compensation to our independent directors, employees, advisors, consultants and other personnel under our 2013 Plan. Certain awards earned under the plan are based on achieving various performance targets, which are generally earned between 0% and 200% of the initial target, depending on the extent to which the performance target is met. In addition to performance targets, certain LTIP units issued by our Operating Partnership also require a certain level of appreciation of partnership interests to occur before parity is reached and LTIP units can be converted to limited partnership units.

We record compensation expense for grants made under the 2013 Plan in accordance with ASC 718, *Compensation-Stock Compensation*. We record compensation expense for unvested grants that vest solely based on service conditions on a straight-line basis over the vesting period of the entire award based upon the fair market value of the grant on the date of grant. Fair market value for restricted common stock is based on our share price on the date of grant. For awards where the vesting is contingent upon achievement of certain performance targets, compensation expense is measured based on the fair market value on the grant date and is recorded over the requisite service period (which includes the performance period). Actual performance results at the end of the performance period determines the number of shares that will ultimately be awarded. We have also issued awards where the vesting is contingent upon service being provided for a defined period and certain market conditions being met. The fair value of these awards, as measured at the grant date, is recognized over the requisite service period, even if the market conditions are not met. The grant date fair value of these awards was developed by an independent appraiser using a Monte Carlo simulation.

Earnings Per Share

We compute earnings per share of common stock in accordance with ASC 260, *Earnings Per Share*. Basic earnings per share is calculated by dividing net income attributable to controlling stockholders (after consideration of the earnings allocated to unvested grants under the 2013 Plan, if applicable) by the weighted-average number of shares of common stock outstanding during the period excluding the weighted average number of unvested grants under the 2013 Plan, if applicable ("participating securities" as defined in Note 12). Diluted earnings per share is calculated by dividing net income attributable to controlling stockholders (after consideration of the earnings allocated to unvested grants under the 2013 Plan, if applicable) by the weighted-average number of shares of common stock outstanding during the period plus other potential common stock instruments if they are dilutive. Other potentially dilutive common stock instruments include our unvested restricted stock,

other equity-based awards, and convertible notes. The restricted stock and other equity-based awards are included if they are dilutive using the treasury stock method. The treasury stock method assumes that theoretical proceeds received for future service provided is used to purchase shares of treasury stock at the average market price per share of common stock, which is deducted from the total shares of potential common stock included in the calculation. When unvested grants are dilutive, the earnings allocated to these dilutive unvested grants are not deducted from the net income attributable to controlling stockholders when calculating diluted earnings per share. The convertible notes are included if they are dilutive using the if-converted method. The if-converted method removes interest expense related to the convertible notes from the net income attributable to controlling stockholders and includes the weighted average shares of potential common stock over the period issuable upon conversion of the note. No adjustment is made for shares of potential common stock that are anti-dilutive during a period.

Segment Reporting

We make equity and debt investments in the energy efficiency, renewable energy, and other sustainable infrastructure markets. We manage our business as a single portfolio and report all of our activities as one business segment.

Recently Issued Accounting Pronouncements

Credit Losses

In June 2016, the FASB issued Topic 326 which significantly changes how entities will recognize and measure credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. Topic 326 has replaced the “incurred loss” approach under existing guidance with an “expected loss” model for instruments measured at amortized cost and require entities to record allowances for expected losses from available-for-sale debt securities rather than reduce the amortized cost, as previously required. It also simplified the accounting model for purchased credit-impaired debt securities and loans. Topic 326 is effective for fiscal years beginning after December 15, 2019 and was to be adopted through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. Topic 326 became effective for us on January 1, 2020. As a result of the adoption of Topic 326, we recorded a cumulative-effect pre-tax adjustment to retained earnings as of January 1, 2020 of approximately \$17 million in the process of establishing our allowance for our commercial receivables. The allowance for our government receivables recorded as of the adoption date of Topic 326 is not material. We did not have a material impact to the accounting for our available-for-sale securities portfolio.

Other accounting standards updates issued before November 6, 2020, and effective after September 30, 2020, are not expected to have a material effect on our consolidated financial statements and related disclosures.

3. Fair Value Measurements

Fair value is defined as the price that would be received for an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. The fair value accounting guidance provides a three-level hierarchy for classifying financial instruments. The levels of inputs used to determine the fair value of our financial assets and liabilities carried on the balance sheet at fair value and for those which only disclosure of fair value is required are characterized in accordance with the fair value hierarchy established by ASC 820, Fair Value Measurements. Where inputs for a financial asset or liability fall in more than one level in the fair value hierarchy, the financial asset or liability is classified in its entirety based on the lowest level input that is significant to the fair value measurement of that financial asset or liability. We use our judgment and consider factors specific to the financial assets and liabilities in determining the significance of an input to the fair value measurements. As of September 30, 2020 and December 31, 2019, only our residual assets related to our securitization trusts and investments were carried at fair value on the consolidated balance sheets on a recurring basis. The three levels of the fair value hierarchy are described below:

- Level 1 — Quoted prices (unadjusted) in active markets that are accessible at the measurement date.
- Level 2 — Observable prices that are based on inputs not quoted on active markets but corroborated by market data.
- Level 3 — Unobservable inputs are used when little or no market data is available.

The tables below illustrate the estimated fair value of our financial instruments on our balance sheet. Unless otherwise discussed below, fair value for our Level 2 and Level 3 measurements is measured using a discounted cash flow model, contractual terms and inputs which consist of base interest rates and spreads over base rates which are based upon market observation and recent comparable transactions. An increase in these inputs would result in a lower fair value and a decline would result in a higher fair value. Our senior unsecured notes and convertible notes are valued using a market based approach and observable prices. The receivables held-for-sale, if any, are carried at the lower of cost or fair value.

	As of September 30, 2020		
	Fair Value	Carrying Value	Level
	<i>(in millions)</i>		
Assets			
Government receivables	\$ 283	\$ 251	Level 3
Commercial receivables	895	849	Level 3
Investments ⁽¹⁾	52	52	Level 3
Securitization residual assets ⁽²⁾	142	142	Level 3
Liabilities ⁽³⁾			
Credit facilities	\$ 23	\$ 23	Level 3
Non-recourse debt	688	613	Level 3
Senior unsecured notes	1,344	1,295	Level 2
Convertible notes	393	295	Level 2

(1) The amortized cost of our investments as of September 30, 2020, was \$ 47 million.

(2) Included in securitization assets on the consolidated balance sheet. This amount excludes securitization servicing assets, which are carried at amortized cost.

(3) Fair value and carrying value exclude unamortized financing costs.

	As of December 31, 2019		
	Fair Value	Carrying Value	Level
	<i>(in millions)</i>		
Assets			
Government receivables	\$ 278	\$ 263	Level 3
Commercial receivables	906	896	Level 3
Investments ⁽¹⁾	75	75	Level 3
Securitization residual assets ⁽²⁾	122	122	Level 3
Liabilities ⁽³⁾			
Credit facilities	\$ 31	\$ 31	Level 3
Non-recourse debt	739	716	Level 3
Senior unsecured notes	540	520	Level 2
Convertible notes	185	152	Level 2

(1) The amortized cost of our investments as of December 31, 2019, was \$ 74 million.

(2) Included in securitization assets on the consolidated balance sheet. This amount excludes securitization servicing assets, which are carried at amortized cost.

(3) Fair value and carrying value exclude unamortized financing costs.

Investments

The following table reconciles the beginning and ending balances for our Level 3 investments that are carried at fair value on a recurring basis:

	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
	<i>(in millions)</i>			
Balance, beginning of period	\$ 46	\$ 124	\$ 75	\$ 170
Purchases of investments	5	7	23	22
Principal payments on investments	—	(2)	(2)	(4)
Sale of investments	—	(20)	(53)	(85)
Realized gains on investments recorded in gain on sale of receivables and investments	—	2	5	2
Unrealized gains (losses) on investments recorded in OCI	1	2	4	8
Balance, end of period	<u>\$ 52</u>	<u>\$ 113</u>	<u>\$ 52</u>	<u>\$ 113</u>

The following table illustrates our investments in an unrealized loss position:

	Estimated Fair Value		Unrealized Losses ⁽¹⁾	
	Securities with a loss shorter than 12 months	Securities with a loss longer than 12 months	Securities with a loss shorter than 12 months	Securities with a loss longer than 12 months
	<i>(in millions)</i>			
September 30, 2020	\$ 5	\$ 7	\$ —	\$ —
December 31, 2019	25	8	—	1

(1) Loss position is due to interest rates movements. We have the intent and ability to hold these investments until a recovery of fair value.

In determining the fair value of our investments we used a market-based risk-free rate and a range of interest rate spreads of approximately 1% to 5% based upon transactions involving similar assets as of September 30, 2020 and December 31, 2019. The weighted average discount rate used to determine the fair value of our investments as of September 30, 2020 and December 31, 2019 were 3.0% and 4.4%, respectively.

Securitization residual assets

The following table reconciles the beginning and ending balances for our Level 3 securitization residual assets that are carried at fair value on a recurring basis:

	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
	<i>(in millions)</i>			
Balance, beginning of period	\$ 135	\$ 79	\$ 122	\$ 71
Accretion of securitization residual assets	2	1	4	3
Additions to securitization residual assets	9	10	36	25
Collections of securitization residual assets	(4)	(1)	(9)	(6)
Sales of securitization residual assets	—	(13)	(21)	(18)
Unrealized gains (losses) on securitization residual assets recorded in AOCI	—	8	10	9
Balance, end of period	<u>\$ 142</u>	<u>\$ 84</u>	<u>\$ 142</u>	<u>\$ 84</u>

In determining the fair value of our securitization residual assets, we used a market-based risk-free rate and a range of interest rate spreads of approximately 1% to 5% based upon transactions involving similar assets as of September 30, 2020 and December 31, 2019. The weighted average discount rate used to determine the fair value of our securitization residual assets as of September 30, 2020 and December 31, 2019 were 4.0% and 4.4%, respectively.

Non-recurring Fair Value Measurements

Our financial statements may include non-recurring fair value measurements related to acquisitions and non-monetary transactions, if any. Assets acquired in a business combination are recorded at their fair value. We may use third-party valuation firms to assist us with developing our estimates of fair value.

Concentration of Credit Risk

Government and commercial receivables, real estate leases, and debt investments consist primarily of U.S. federal government-backed receivables, investment grade state and local government receivables and receivables from various sustainable infrastructure projects and do not, in our view, represent a significant concentration of credit risk. Additionally, certain of our investments are collateralized by projects concentrated in certain geographic regions throughout the United States. These investments typically have structural credit protections to mitigate our risk exposure and, in most cases, the projects are insured for estimated physical loss which helps to mitigate the possible risk from these concentrations.

We had cash deposits that are subject to credit risk as shown below:

	September 30, 2020	December 31, 2019
	<i>(in millions)</i>	
Cash deposits	\$ 881	\$ 6
Restricted cash deposits (included in other assets)	24	101
Total cash deposits	<u>\$ 905</u>	<u>\$ 107</u>
Amount of cash deposits in excess of amounts federally insured	\$ 904	\$ 105

4. Non-Controlling Interest

Units of limited partnership interests in the Operating Partnership ("OP units") that are owned by limited partners other than us are included in non-controlling interest on our consolidated balance sheets. The non-controlling interest holders are generally allocated their pro rata share of income, other comprehensive income and equity transactions.

The outstanding OP units held by outside limited partners represent less than 1% of our outstanding OP units and are redeemable by the limited partners for cash, or at our option, for a like number of shares of our common stock. There were 57,400 OP units exchanged by non-controlling interest holders during the nine months ended September 30, 2020, and 3,703 OP units exchanged during the nine months ended September 30, 2019.

We have also granted to members of our management team and directors LTIP Units pursuant to the 2013 plan. These LTIP Units are held by HASI Management HoldCo LLC. The LTIP Units are designed to qualify as profits interests in the Operating Partnership and initially will have a capital account balance of zero and, therefore, will not have full parity with OP units with respect to liquidating distributions or other rights. However, the amended and restated agreement of limited partnership of the Operating Partnership (the "OP Agreement") provides that "book gains," or economic appreciation, in the Operating Partnership will be allocated first to the LTIP Units until the capital account per LTIP Units is equal to the capital account per-unit of the OP units. Under the terms of the OP Agreement, the Operating Partnership will revalue its assets upon the occurrence of certain specified events, and any increase in valuation from the time of grant until such event will be allocated first to the holders of LTIP Units to equalize the capital accounts of such holders with the capital accounts of OP unit holders. Once this has occurred, the LTIP Units will achieve full parity with the OP units for all purposes, including with respect to liquidating distributions and redemption rights. In addition to these attributes, there are vesting and settlement conditions similar to our other equity-based awards as discussed in Notes 2 and 11.

5. Securitization of Financial Assets

The following summarizes certain transactions with securitization trusts:

	As of and for the nine months ended September 30,	
	2020	2019
	<i>(in millions)</i>	
Gains on securitizations	\$ 34	\$ 16
Cost of financial assets securitized	173	560
Proceeds from securitizations	207	576
Residual and servicing assets	147	85
Cash received from residual and servicing assets	9	7

In connection with securitization transactions, we typically retain servicing responsibilities and residual assets. We generally receive annual servicing fees typically up to 0.20% of the outstanding balance. We may periodically make servicer advances, which are subject to credit risk. Included in securitization assets in our consolidated balance sheets are our servicing assets at amortized cost, our residual assets at fair value, and our servicing advances at cost, if any. Our residual assets are subordinate to investors' interests, and their values are subject to credit, prepayment and interest rate risks on the transferred financial assets. The investors and the securitization trusts have no recourse to our other assets for failure of debtors to pay when due. In computing gains and losses on securitizations, we use discount rates based on a review of comparable market transactions including Level 3 unobservable inputs which consist of base interest rates and spreads over these rates, including estimates of subordination and prepayment risk, if any. Depending on the nature of the transaction risks, the discount rate ranged from 2% to 8%.

As of September 30, 2020 and December 31, 2019, our managed assets totaled \$4.4 billion and \$6.2 billion respectively, of which \$4.2 billion and \$4.1 billion were securitized assets held in unconsolidated securitization trusts. There were no securitization credit losses in the nine months ended September 30, 2020 or 2019. As of September 30, 2020, there were no material payments from debtors to the securitization trusts that were greater than 90 days past due.

Receivables from contracts for the installation of energy efficiency and other technologies are \$95 million of our securitization residual assets. These technologies are installed in facilities owned by, or operated for or by, federal, state or local government entities where the ultimate obligor for the receivable is a governmental entity. The contracts may have guarantees of energy savings from third-party service providers, which typically are entities rated investment grade by an independent rating agency. The remainder of our securitization residual assets are related to contracts where the underlying cash flows are secured by an interest in real estate which are typically senior in terms of repayment to other financings.

6. Our Portfolio

As of September 30, 2020, our Portfolio included approximately \$2.2 billion of equity method investments, receivables, real estate and investments on our balance sheet. The equity method investments represent our non-controlling equity investments in renewable energy and energy efficiency projects and land. The receivables and investments are typically collateralized by contractually committed debt obligations of government entities or private high credit quality obligors and are often supported by additional forms of credit enhancement, including security interests and supplier guaranties. The real estate is typically land and related lease intangibles for long-term leases to wind and solar projects. Our analysis of our Portfolio has historically been analyzed by type of obligor categorized as either government or commercial obligors and whether those obligors are investment grade or non-investment grade. In conjunction with the adoption of Topic 326, we re-evaluated our reporting for this disclosure and have modified our credit quality disclosure to provide more detail of how the assets in our Portfolio are performing. Additionally, as discussed in Note 2, we have adopted Topic 326 which requires the establishment of an allowance at origination for our receivables expected over the life of the asset rather than at the time it is probable that a loss has been incurred. These allowances are reflected in our disclosures below and are not necessarily an indication that an actual loss has been incurred.

We determine our expectation of credit losses related to our investments by evaluating a number of qualitative and quantitative factors including a project's operating results, loan-to-value ratio, any cash reserves, the ability of expected cash from operations to cover the cash flow requirements currently and into the future, key terms of the transaction, the ability of the borrower to refinance the transaction, the financial and operating capability of the borrower, its sponsors or the obligor as well as any guarantors and the project's collateral value. In addition, when deriving our reasonable and supportable forecasts we consider the overall economic environment, the sustainable infrastructure sector, the effect of local, industry, and broader

economic factors, the impact of any variation in weather and the historical and anticipated trends in interest rates, defaults and loss severities for similar transactions.

The following is an analysis of the Performance Ratings of our Portfolio as of September 30, 2020, which is assessed quarterly:

	Portfolio Performance						Total
	1 ⁽¹⁾		2 ⁽²⁾		3 ⁽³⁾		
	Government	Commercial	Government	Commercial	Government	Commercial	
	<i>(dollars in millions)</i>						
Receivable vintage							
2020	\$ —	\$ 85	\$ —	\$ —	\$ —	\$ —	\$ 85
2019	2	399	—	2	—	—	403
2018	—	270	—	—	—	—	270
2017	38	1	—	8	—	—	47
2016	68	60	—	—	—	—	128
2015	88	—	—	—	—	—	88
Prior to 2015	55	47	—	—	—	8	110
Total receivables	251	862	—	10	—	8	1,131
Less: Allowance for loss on receivables	—	(19)	—	(4)	—	(8)	(31)
Net receivables ⁽⁴⁾	251	843	—	6	—	—	1,100
Investments	36	16	—	—	—	—	52
Real estate	—	360	—	—	—	—	360
Equity method investments ⁽⁵⁾	—	695	—	24	—	—	719
Total	\$ 287	\$ 1,914	\$ —	\$ 30	\$ —	\$ —	\$ 2,231
Percent of Portfolio	13 %	86 %	— %	1 %	— %	— %	100 %
Average remaining balance ⁽⁶⁾	\$ 7	\$ 12	\$ —	\$ 11	\$ —	\$ 4	\$ 11

- (1) This category includes our assets where based on our credit criteria and performance to date we believe that our risk of not receiving our invested capital remains low.
- (2) This category includes our assets where based on our credit criteria and performance to date we believe there is a moderate level of risk to not receiving some or all of our invested capital.
- (3) This category includes our assets where based on our credit criteria and performance to date, we believe there is substantial doubt regarding our ability to recover some or all of our invested capital. Included in this category are two commercial receivables with a combined total carrying value of approximately \$ 8 million as of September 30, 2020 which we have held on non-accrual status since 2017. We recorded an allowance for the entire asset amounts as described in our 2019 Form 10-K. We expect to continue to pursue our legal claims with regards to these assets.
- (4) Total reconciles to the total of the government receivables and commercial receivables lines of the consolidated balance sheets
- (5) Some of the individual projects included in portfolios that make up our equity method investments have government off-takers. As they are part of large portfolios, they are not classified separately.
- (6) Average remaining balance is calculated gross of allowance for loss on receivables and excludes approximately 145 transactions each with outstanding balances that are less than \$ 1 million and that in the aggregate total \$58 million.

Receivables

We adopted Topic 326 during the nine months ended September 30, 2020 which requires us to recognize a provision for loss on receivables expected over the life of the receivable rather than only recording an allowance when it is probable a loss has been incurred. As of December 31, 2019, we had an allowance for loss on receivables on specific assets of \$8 million discussed above with a Performance Rating of 3. At adoption on January 1, 2020, we recorded an additional pre-tax allowance for loss on receivables of \$17 million which reflects our estimated loss as of that date. Quarterly, we update that expected loss to reflect both the expected loss on newly originated receivables and any changes in the expected loss on existing receivables. During the three months ended September 30, 2020, we increased the allowance on our receivables by \$2 million, primarily as a result of additional loan commitments made during this period. During the nine months ended September 30, 2020, we increased our reserve by \$6 million as a result of additional loan commitments made during the period, and to a lesser extent, the potential impacts of the COVID-19 pandemic on our commercial receivables. While macroeconomic indicators we consider

in our analyses including unemployment rates and power prices degraded over the nine months ended September 30, 2020, these factors are mitigated by the high credit quality of our obligors and the structural protections of our investments.

Below is a summary of the carrying value and allowance by type of receivable or "Portfolio Segment", as defined by Topic 326, as of September 30, 2020 and January 1, 2020:

	September 30, 2020		January 1, 2020	
	Carrying Value	Allowance	Carrying Value	Allowance
	<i>(in millions)</i>			
Government ⁽¹⁾	\$ 251	\$ —	\$ 263	\$ —
Commercial ⁽²⁾	880	31	904	26
Total	\$ 1,131	\$ 31	\$ 1,167	\$ 26

(1) As of September 30, 2020, our government receivables include \$ 145 million of U.S. federal government transactions and \$ 106 million of transactions where the ultimate obligors are state or local governments.

Risk characteristics of our government receivables include the energy savings or the power output of the projects and the ability of the government obligor to generate revenue for debt service, via taxation or other means. Transactions may have guarantees of energy savings or other performance support from third-party service providers, which typically are entities, directly or whose ultimate parent entity is, rated investment grade by an independent rating agency. All of our government receivables are included in Performance Rating 1 in the Portfolio Performance table above. Our allowance for government receivables is primarily calculated by using PD/LGD methods as discussed in Note 2. Our expectation of credit losses for these receivables is immaterial given the high credit-quality of the obligors.

(2) As of September 30, 2020, this category of assets includes \$ 469 million of mezzanine loans made on a non-recourse basis to special purpose subsidiaries of residential solar companies which are secured by residential solar assets where we rely on certain limited indemnities, warranties, and other obligations of the residential solar companies or their other subsidiaries. Approximately \$370 million of our commercial receivables are loans made to entities in which we also have non-controlling equity investments of approximately \$16 million. This total also includes \$ 47 million of lease agreements where we hold legal title to the underlying real estate which are treated under GAAP as receivables since they were deemed to be failed sale/leaseback transactions as described in Note 2.

Risk characteristics of our commercial receivables include a project's operating risks, which include the impact of the overall economic environment, the sustainable infrastructure sector, the effect of local, industry, and broader economic factors, the impact of any variation in weather and trends in interest rates. We use assumptions related to these risks to estimate an allowance using a discounted cash flow analysis or the PD/LGD method as discussed in Note 2. All of our commercial receivables are included in Performance Rating 1 in the Portfolio Performance table above, except for \$10 million of receivables included in Performance Category 2 and the \$ 8 million of receivables we have placed on non-accrual status which are included in Performance Rating 3. For those assets in Performance Rating 1, the credit worthiness of the obligor combined with the various structural protections of our assets cause us to believe we have a low risk we will not receive our invested capital, however we recorded a \$19 million allowance on these \$ 862 million in assets as a result of lower probability assumptions utilized in our allowance methodology.

The following table reconciles our beginning and ending allowance for loss on receivables by Portfolio Segment:

	Three months ended September 30, 2020		Nine months ended September 30, 2020	
	Government	Commercial	Government	Commercial
	<i>(in thousands)</i>			
Beginning balance	\$ —	\$ 28,831	\$ —	\$ 25,660
Provision for loss on receivables	—	2,458	—	5,629
Ending balance	\$ —	\$ 31,289	\$ —	\$ 31,289

Other than the \$8 million of receivables discussed above with a Performance Rating of 3, we have no receivables which are on non-accrual status.

The following table provides a summary of our anticipated maturity dates of our receivables and the weighted average yield for each range of maturities as of September 30, 2020:

	Total	Less than 1 year	1-5 years			5-10 years	More than 10 years
			1-5 years	5-10 years	More than 10 years		
	<i>(dollars in millions)</i>						
Maturities by period (excluding allowance)	\$ 1,131	\$ —	\$ 176	\$ 302	\$ 653		
Weighted average yield by period	8.2 %	— %	7.2 %	9.1 %	7.6 %		

Investments

The following table provides a summary of our anticipated maturity dates of our investments and the weighted average yield for each range of maturities as of September 30, 2020:

	Total	Less than 1 year	1-5 years	5-10 years	More than 10 years
	<i>(dollars in millions)</i>				
Maturities by period	\$ 52	\$ —	\$ —	\$ —	\$ 52
Weighted average yield by period	3.9 %	— %	— %	— %	3.9 %

We had no investments that were impaired or on non-accrual status as of September 30, 2020 or December 31, 2019, and no allowances associated with our investments.

Real Estate

Our real estate is leased to renewable energy projects, typically under long-term triple net leases with expiration dates that range between the years 2033 and 2057 under the initial terms and 2047 and 2080 if all renewals are exercised. The components of our real estate portfolio as of September 30, 2020 and December 31, 2019, were as follows:

	September 30, 2020	December 31, 2019
	<i>(in millions)</i>	
Real estate		
Land	\$ 269	\$ 269
Lease intangibles	104	104
Accumulated amortization of lease intangibles	(13)	(11)
Real estate	<u>\$ 360</u>	<u>\$ 362</u>

As of September 30, 2020, the future amortization expense of the intangible assets and the future minimum rental income payments under our land lease agreements are as follows:

	Future Amortization Expense	Minimum Rental Income Payments
	<i>(in millions)</i>	
From October 1, 2020 to December 31, 2020	\$ 1	\$ 6
2021	3	22
2022	3	22
2023	3	23
2024	3	24
2025	3	24
Thereafter	75	740
Total	<u>\$ 91</u>	<u>\$ 861</u>

Equity Method Investments

We have made non-controlling equity investments in a number of renewable energy and energy efficiency projects as well as in a joint venture that owns land with long-term triple net lease agreements to several solar projects that we account for as equity method investments.

As of September 30, 2020, we held the following equity method investments:

Investment Date	Investee	Carrying Value <i>(in millions)</i>
July 2020	Jupiter Equity Holdings, LLC	\$ 152
March 2020	University of Iowa Energy Collaborative Holdings LLC	116
December 2015	Buckeye Wind Energy Class B Holdings, LLC	72
Various	2007 Vento I, LLC	64
Various	Vivint Solar Asset 1 Class B, LLC	60
Various	Vivint Solar Asset 2 Class B, LLC	60
October 2016	Invenergy Gunsight Mountain Holdings, LLC	33
Various	Other investees	162
	Total equity method investments	\$ 719

On July 1, 2020, we acquired a preferred equity interest in Jupiter Equity Holdings, LLC ("the Partnership") that is expected to own an approximately 2.3 gigawatt portfolio of renewable energy projects. We have agreed to guarantee certain of the obligations of the subsidiary in connection with these agreements. To date, we have made capital contributions to the Partnership of approximately \$150 million related to four operating wind projects with an aggregate capacity of approximately 663 megawatts. We expect to ultimately invest approximately \$540 million in the Partnership by making additional periodic capital contributions related to nine more projects anticipated to be commercially operational on or prior to June 30, 2021, at which time the additional projects relating to a specific funding will be transferred into the Partnership. Assuming all of the projects are acquired by the Partnership, the renewables portfolio will consist of 13 projects (nine onshore wind projects and four utility-scale solar projects) and will feature cash flows from fixed-price power purchase agreements and financial hedges with a weighted average contract life of 13 years, contracted with highly creditworthy off-takers and counterparties.

The Partnership is governed by an amended and restated limited liability company agreement, dated July 1, 2020, by and among the Partnership, one of our subsidiaries and a subsidiary of the project sponsor, and contains customary terms and conditions. We own 100% of the Class A Units in the Partnership corresponding to 49% of the distributions from the Partnership subject to the preferences discussed below. Most major decisions that may impact the Partnership, its subsidiaries or its assets, require the majority vote of a four person committee in which we and the project sponsor each have two representatives. Through the Partnership, we will be entitled to preferred distributions until certain return targets are achieved. Once these return targets are achieved, then distributions will be allocated approximately 33% to us and approximately 67% to the sponsor. We and the sponsor each have a right of first offer if the other party desires to transfer any of its equity ownership to a third party on or after July 1, 2023. We use the equity method of accounting to account for our preferred equity interest in the Partnership, and have elected to recognize earnings from this investment one quarter in arrears to allow for the receipt of financial information.

Based on an evaluation of our equity method investments, we determined that no OTTI had occurred as of September 30, 2020 or December 31, 2019.

7. Credit facilities

Senior credit facilities

We have two senior revolving credit facilities (our "Senior Credit Facilities"), a representation-based loan agreement (the "Rep-Based Facility") and an approval-based loan agreement (the "Approval-Based Facility") with various lenders, which mature in July 2023. The Rep-Based Facility is a senior secured revolving limited-recourse credit facility with a maximum outstanding principal amount of \$250 million and the Approval-Based Facility is a senior secured revolving recourse credit facility with a maximum outstanding principal amount of \$200 million.

The following table provides additional detail on our Senior Credit Facilities as of September 30, 2020:

	Rep-Based Facility	Approval-Based Facility
	<i>(dollars in millions)</i>	
Outstanding balance	\$ —	\$ 23
Value of collateral pledged to credit facility	25	152
Weighted average short-term borrowing rate	N/A	1.66 %

Loans under the Rep-Based Facility bear interest at a rate equal to one-month LIBOR plus 1.40% or 1.85% (depending on the type of collateral) or, in certain circumstances, the Federal Funds Rate plus 0.40% or 0.85% (depending on the type of collateral) and loans under the Approval-Based Facility bear interest at a rate equal to one-month LIBOR plus 1.50% or 2.00% (depending on the type of collateral) or, under certain circumstances, the Federal Funds Rate plus 0.50% or 1.00% (depending on the type of collateral).

Inclusion of any financings of the Company in the borrowing base as collateral under the Rep-Based Facility will be subject to the Company making certain agreed upon representations and warranties. We have provided a limited guarantee covering the accuracy of the representations and warranties, and the repayment by the borrowers of certain amounts relating to any such financing is the exclusive remedy with respect to any breach of such representations and warranties under the Rep-Based Facility. Inclusion of any financings of the Company in the borrowing base as collateral under the Approval-Based Facility will be subject to the approval of a super-majority of the lenders, and we have provided a guarantee of the Approval-Based Facility.

The amount eligible to be drawn under the facilities is based on a discount to the value of each included investment based upon the type of collateral or an applicable valuation percentage. The sum of included financings after taking into account the applicable valuation percentages and any changes in the valuation of the financings in accordance with the Loan Agreements determines the borrowing capacity, subject to the overall facility limits described above. Under the Rep-Based Facility, the applicable valuation percentage is 85% in the case of a land-lease obligor or a U.S. Federal Government obligor, 80% in the case of an institutional obligor or state and local obligor, and with respect to other obligors or in certain circumstances, such other percentage as the administrative agent may prescribe. Under the Approval-Based Facility, the applicable valuation percentage is 85% in the case of certain approved financings and 67% or such other percentage as the administrative agent may prescribe, including in the case of one asset, an agreed-upon amortization schedule. The stated minimum maturities to be paid under the amortization schedule to meet the required target loan balances as of September 30, 2020 are as follows:

	<u>Future minimum maturities</u>	
	<i>(in millions)</i>	
October 1, 2020 to December 31, 2020	\$	—
2021		—
2022		7
2023		16
Total	\$	23

We have approximately \$5 million of remaining unamortized financing costs associated with the credit facilities that have been capitalized and included in other assets on our balance sheet and are being amortized on a straight-line basis over the term of the credit facilities. Administrative fees are payable annually to the administrative agent under each of the Loan Agreements and letter agreements with the administrative agent. Under the Rep-Based Facility, we pay to the administrative agent on each monthly payment date, for the benefit of the lenders, certain availability fees for the Rep-Based Facility equal to 0.60%, divided by 365 or 366, as applicable, multiplied by the excess of the available total commitments under the Rep-Based Loan Agreement over the actual amount borrowed under the Rep-Based Facility.

The credit facilities contain terms, conditions, covenants, and representations and warranties that are customary and typical for a transaction of this nature, including various affirmative and negative covenants, and limitations on the incurrence of liens and indebtedness, investments, fundamental organizational changes, dispositions, changes in the nature of business, transactions with affiliates, use of proceeds and stock repurchases. We were in compliance with our covenants as of September 30, 2020.

The credit facilities also include customary events of default, including the existence of a default in more than 50% of underlying financings. The occurrence of an event of default may result in termination of the credit facilities, acceleration of amounts due under the credit facilities, and accrual of default interest at a rate of LIBOR plus 2.00% in the case of both the Rep-Based Facility and the Approval-Based Facility.

8. Long-term Debt

Non-recourse debt

We have outstanding the following asset-backed non-recourse debt and bank loans:

	Outstanding Balance as of		Interest Rate ⁽¹⁾	Maturity Date	Anticipated Balance at Maturity	Carrying Value of Assets Pledged as of		Description of Assets Pledged
	September 30, 2020	December 31, 2019				September 30, 2020	December 31, 2019	
	<i>(dollars in millions)</i>							
HASI Sustainable Yield Bond 2015-1A	\$ 83	\$ 85	4.28%	October 2034	\$ —	\$ 134	\$ 126	Receivables, real estate and real estate intangibles
HASI Sustainable Yield Bond 2015-1B Note	13	13	5.41%	October 2034	—	134	126	Class B Bond of HASI Sustainable Yield Bond 2015-1
2017 Credit Agreement ⁽²⁾	—	61	N/A	January 2023	—	—	120	Equity interests in Strong Upwind Holdings I, II, III, and IV LLC, and Northern Frontier, LLC
HASI SYB Loan Agreement 2015-2 ⁽³⁾	—	28	N/A	December 2023	—	—	73	Equity interest in Buckeye Wind Energy Class B Holdings LLC
HASI SYB Trust 2016-2	72	72	4.35%	April 2037	—	72	76	Receivables
HASI ECON 101 Trust	126	129	3.57%	May 2041	—	133	135	Receivables and investments
HASI SYB Trust 2017-1	152	155	3.86%	March 2042	—	205	206	Receivables, real estate and real estate intangibles
Lannie Mae Series 2019-01	95	96	3.68%	January 2047	—	108	106	Receivables, real estate and real estate intangibles
Other non-recourse debt ⁽⁴⁾	72	77	3.15% - 7.45%	2022 to 2032	18	72	77	Receivables
Unamortized financing costs	(13)	(16)						
Non-recourse debt ⁽⁵⁾	<u>\$ 600</u>	<u>\$ 700</u>						

(1) Represents interest rate as of September 30, 2020.

(2) This loan was prepaid in January 2020.

(3) This loan was prepaid in September 2020.

(4) Other non-recourse debt consists of various debt agreements used to finance certain of our receivables for their term. Debt service payment requirements, in a majority of cases, are equal to or less than the cash flows received from the underlying receivables.

(5) The total collateral pledged against our non-recourse debt was \$ 724 million and \$ 921 million as of September 30, 2020 and December 31, 2019, respectively. In addition, \$ 24 million and \$ 23 million of our restricted cash balance was pledged as collateral to various non-recourse loans as of September 30, 2020 and December 31, 2019, respectively.

We have pledged the financed assets, and typically our interests in one or more parents or subsidiaries of the borrower that are legally separate bankruptcy remote special purpose entities as security for the non-recourse debt. There is no recourse for repayment of these obligations other than to the applicable borrower and any collateral pledged as security for the obligations. Generally, the assets and credit of these entities are not available to satisfy any of our other debts and obligations. The creditors can only look to the borrower, the cash flows of the pledged assets and any other collateral pledged, to satisfy the debt and we are not otherwise liable for nonpayment of such cash flows. The debt agreements contain terms, conditions, covenants, and representations and warranties that are customary and typical for transactions of this nature, including limitations on the incurrence of liens and indebtedness, investments, fundamental organizational changes, dispositions, changes in the nature of business, transactions with affiliates, use of proceeds and stock repurchases. The agreements also include customary events of default, the occurrence of which may result in termination of the agreements, acceleration of amounts due, and accrual of default interest. We typically act as servicer for the debt transactions. We are in compliance with all covenants as of September 30, 2020 and December 31, 2019.

We have guaranteed the accuracy of certain of the representations and warranties and other obligations of certain of our subsidiaries under certain of the debt agreements and provided an indemnity against certain losses from “bad acts” of such subsidiaries including fraud, failure to disclose a material fact, theft, misappropriation, voluntary bankruptcy or unauthorized transfers. In the case of the debt secured by certain of our renewable energy equity interests, we have also guaranteed the compliance of our subsidiaries with certain tax matters and certain obligations if our joint venture partners exercise their right to withdraw from our partnerships.

The stated minimum maturities of non-recourse debt as of September 30, 2020, were as follows:

	Future minimum maturities	
	<i>(in millions)</i>	
October 1, 2020 to December 31, 2020	\$	12
2021		25
2022		27
2023		30
2024		34
2025		31
Thereafter		454
Total minimum maturities	\$	613
Unamortized financing costs		(13)
Total non-recourse debt	\$	600

The stated minimum maturities of non-recourse debt above include only the mandatory minimum principal payments. To the extent there are additional cash flows received from our investments in renewable energy projects serving as collateral for certain of our non-recourse debt facilities, these additional cash flows are required to be used to make additional principal payments against the respective debt. Any additional principal payments made due to these provisions may impact the anticipated balance at maturity of these financings. To the extent there are not sufficient cash flows received from those investments pledged as collateral, the investor has no recourse against other corporate assets to recover any shortfalls.

Senior Unsecured Notes

We have outstanding senior unsecured notes issued jointly by certain of our TRS and are guaranteed by the Company and certain other subsidiaries (the "Senior Unsecured Notes"), including \$375 million aggregate principal amount of 3.75% Senior Unsecured Notes due 2030 (the "2030 Notes") issued in August 2020 at 99% of par. The Senior Unsecured Notes are subject to covenants which limit our ability to incur additional indebtedness and require us to maintain unencumbered assets of not less than 120% of our unsecured debt. These covenants will terminate on any date at which the Senior Unsecured Notes have been rated investment grade by two of the three major credit rating agencies and no event of default has occurred. We are in compliance with all of our covenants as of September 30, 2020 and December 31, 2019. The Senior Unsecured Notes impose certain requirements in the event that we merge with or sell substantially all of our assets to another entity. The proceeds of our Senior Unsecured Notes are used to acquire or refinance, in whole or in part, eligible green projects, including assets which are neutral to negative on incremental carbon emissions.

The following are summarized terms of the Senior Unsecured Notes:

	Outstanding Principal Amount	Maturity Date	Stated Interest Rate	Interest Payment Dates	Redemption Terms Modification Date
	<i>(in millions)</i>				
2024 Notes	\$ 500 ⁽¹⁾	July 15, 2024	5.25 %	January 15th and July 15th	July 15, 2021 ⁽²⁾
2025 Notes	400	April 15, 2025	6.00 %	April 15 and October 15th	April 15, 2020 ⁽²⁾
2030 Notes	375 ⁽³⁾	September 15, 2030	3.75 %	February 15th and August 15th	September 15, 2022 ⁽⁴⁾

(1) The first \$350 million issuance of 2024 Notes was priced at par. We subsequently issued \$150 million of the \$500 million aggregate principal amount of the 2024 Notes for total proceeds of \$157 million (\$155 million net of issuance costs) at an effective interest rate of 4.13%.

(2) Prior to this date, we may redeem, at our option, some or all of the 2024 Notes or 2025 Notes for the outstanding principal amount plus the applicable "make-whole" premium as defined in the indenture governing the 2024 Notes or 2025 Notes plus accrued and unpaid interest through the redemption date. In addition, prior to this date, we may redeem up to 40% of the Senior Unsecured Notes using the proceeds of certain equity offerings at a price equal to par plus the coupon percentage of the principal amount thereof, plus accrued but unpaid interest, if any, to, but excluding, the applicable redemption date. On, or subsequent to, this date we may redeem the 2024 or 2025 Notes in whole or in part at redemption prices defined in the indenture governing the 2024 Notes or 2025 Notes, plus accrued and unpaid interest through the redemption date.

- (3) We issued the \$375 million aggregate principal amount of the 2030 Notes for total proceeds of \$ 371 million (\$367 million net of issuance costs) at an effective interest rate of 3.87%.
- (4) Prior to this date, we may, at our option on one or more occasions redeem up to 40% of the 2030 Notes using the proceeds of certain equity offerings at a price equal to 103.75% of the principal amount thereof; plus accrued but unpaid interest, if any, to, but excluding the applicable redemption date. At any point prior to maturity, we may redeem, at our option, some or all of the 2030 Notes plus the applicable "make-whole" premium as defined in the indenture governing the 2030 Notes plus accrued and unpaid interest through the redemption date.

The following table presents a summary of the components of the Senior Unsecured Notes:

	September 30, 2020	December 31, 2019
	<i>(in millions)</i>	
Principal	\$ 1,275	\$ 500
Accrued interest	18	13
Unamortized premium	2	7
Less: Unamortized financing costs	(16)	(8)
Carrying value of Notes	<u>\$ 1,279</u>	<u>\$ 512</u>

We recorded approximately \$14 million and \$33 million, in interest expense related to the Senior Unsecured Notes in the three and nine months ended September 30, 2020, respectively, compared to approximately \$5 million in each of the three and nine months ended September 30, 2019.

Convertible Senior Notes

We have outstanding \$294 million aggregate principal amount of convertible senior notes ("Convertible Senior Notes"), including \$144 million of principal amount convertible senior notes due August 15, 2023 issued in August 2020 at a stated interest rate of 0%. Holders may convert any of their convertible notes into shares of our common stock at the applicable conversion ratio at any time prior to the close of business on the second scheduled trading day immediately preceding the maturity date, unless the convertible notes have been previously redeemed or repurchased by us.

The following are summarized terms of the Convertible Senior Notes as of September 30, 2020:

	Outstanding Principal Amount	Maturity Date	Stated Interest Rate	Interest Payment Dates	Conversion Ratio	Conversion Price	Issuable Shares	Dividend Threshold Amount ⁽¹⁾
	<i>(in millions)</i>						<i>(in millions)</i>	
2022 Convertible Notes	\$ 150	September 1, 2022	4.125 %	March 1 and September 1	36.7680	\$27.20	5.5	\$0.33
2023 Convertible Notes	144	August 15, 2023	0.000 %	N/A	20.6779	\$48.36	3.0	\$0.34

(1) The conversion ratio is subject to adjustment for dividends declared above these amounts per share per quarter and certain other events that may be dilutive to the holder.

For both the 2022 Convertible Notes and the 2023 Convertible Notes, following the occurrence of a make-whole fundamental change, we will, in certain circumstances, increase the conversion rate for a holder that converts its convertible notes in connection with such make-whole fundamental change. There are no cash settlement provisions in the convertible notes and the conversion option can only be settled through physical delivery of our common stock. Additionally, upon the occurrence of certain fundamental changes involving us, holders of the convertible notes may require us to redeem all or a portion of their convertible notes for cash at a price of 100% of the principal amount outstanding, plus accrued and unpaid interest.

We have a redemption option to call the 2022 Convertible Notes prior to maturity (i) on or after March 1, 2022 and (ii) at any time if such a redemption is deemed reasonably necessary to preserve our qualification as a REIT. The redemption price will be equal to the principal of the notes being redeemed, plus accrued and unpaid interest. In the event of redemption after March 1, 2022, there will be an additional make-whole premium paid to the holder of the redeemed notes unless the redemption is deemed reasonably necessary to preserve our qualification as a REIT. We may redeem the 2023 Convertible notes at any time only if such a redemption is deemed reasonably necessary to preserve our qualification as a REIT.

The following table presents a summary of the components of the convertible notes:

	September 30, 2020	December 31, 2019
	<i>(in millions)</i>	
Principal	\$ 294	\$ 150
Accrued interest	1	2
Less: Unamortized financing costs	(6)	(3)
Carrying value of convertible notes	<u>\$ 289</u>	<u>\$ 149</u>

We recorded approximately \$2 million and \$6 million in interest expense related to the convertible notes in the each of three and nine months ended September 30, 2020 and 2019, respectively.

9. Commitments and Contingencies

Litigation

The nature of our operations exposes us to the risk of claims and litigation in the normal course of our business. We are not currently subject to any legal proceedings that are probable of having a material adverse effect on our financial position, results of operations or cash flows.

Guarantees

In connection with some of our transactions, we have provided certain limited representations, warranties, covenants and/or provided an indemnity against certain losses resulting from our own actions, including related to certain investment tax credits. As of September 30, 2020, there have been no such actions resulting in claims against the Company.

We have made a guarantee related to the financing of one of our joint venture entities that owns debt securities of energy efficiency projects. The entity entered into a financing arrangement where we have guaranteed the obligations of the entity related to this financing, which includes collateral posting requirements as well as repayment of the financing at maturity in February 2021. As of September 30, 2020, our maximum obligation under this guarantee is approximately \$60 million. We have executed a separate agreement with the other joint venture partner pursuant to which it is liable for 15% of this obligation repayable to us.

COVID-19

The COVID-19 global pandemic has brought forth uncertainty and disruption to the global economy. As of September 30, 2020, we have not recorded any contingencies on our balance sheet related to COVID-19 with the exception of any allowances related to our receivables described in Note 6. To the extent COVID-19 continues to cause dislocations in the global economy, our financial condition, results of operations, and cash flows may be adversely impacted.

10. Income Tax

We recorded an income tax benefit (expense) of approximately \$(2.3) million and \$(2.9) million for the three and nine months ended September 30, 2020, respectively, compared to a \$(0.1) million and \$1.3 million income tax benefit (expense) in the three and nine months ended September 30, 2019, respectively. For the three and nine months ended September 30, 2020 and 2019, our income tax benefit/expense was determined using the federal tax rate of 21%, and combined state tax rates, net of federal benefit, of approximately 4% for 2020 and 3% for 2019.

11. Equity

Dividends and Distributions

Our board of directors declared the following dividends in 2019 and 2020:

Announced Date	Record Date	Pay Date	Amount per share
2/21/2019	4/3/2019	4/11/2019	\$ 0.335
6/6/2019	7/5/2019	7/12/2019	0.335
9/12/2019	10/3/2019	10/10/2019	0.335
12/13/2019	12/26/2019 ⁽¹⁾	1/10/2020	0.335
2/20/2020	4/2/2020	4/10/2020	0.340
6/5/2020	7/2/2020	7/9/2020	0.340
8/6/2020	10/2/2020	10/9/2020	0.340

(1) This dividend was treated as a distribution in 2020 for tax purposes.

Equity Offerings

We have an effective universal shelf registration statement registering the potential offer and sale, from time to time and in one or more offerings, of any combination of our common stock, preferred stock, depositary shares, debt securities, warrants and rights (collectively referred to as the "securities"). We may offer the securities directly, through agents, or to or through underwriters by means of ordinary brokers' transactions on the NYSE or otherwise at market prices prevailing at the time of sale or at negotiated prices and may include "at the market" ("ATM") offerings or sales "at the market," to or through a market maker or into an existing trading market on an exchange or otherwise. We completed the following public offerings (including ATM issuances) of our common stock between January 1, 2019 and September 30, 2020:

Date/Period	Common Stock Offerings	Shares Issued	Price Per Share	Net Proceeds ⁽²⁾
<i>(amounts in millions, except per share amounts)</i>				
1/3/2019	(1) Public Offering	0.465	\$ 21.60 ⁽³⁾	\$ 9
Q1 2019	ATM	1.603	23.39 ⁽⁴⁾	37
Q2 2019	ATM	1.926	26.33 ⁽⁴⁾	50
Q4 2019	ATM	1.405	30.00 ⁽⁴⁾	42
Q1 2020	ATM	4.500	25.84 ⁽⁴⁾	115
Q2 2020	ATM	1.938	23.10 ⁽⁴⁾	44
Q3 2020	ATM	0.875	33.81 ⁽⁴⁾	29

(1) These are shares issued in connection with the exercise of the underwriters' option to purchase additional shares.

(2) Net proceeds from the offerings are shown after deducting underwriting discounts, commissions and other offering costs.

(3) Represents the price per share at which the underwriters in our public offerings purchased our shares.

(4) Represents the weighted average price per share at which investors in our ATM offerings purchased our shares.

Equity-based Compensation Awards under our 2013 Plan

We have issued equity awards that vest from 2020 to 2024 subject to service, performance and market conditions. During the nine months ended September 30, 2020, our board of directors awarded employees and directors 514,969 shares of restricted stock, restricted stock units and LTIP Units that vest from 2020 to 2024. As of September 30, 2020, we have concluded that it is probable that the performance conditions will be met for previously issued restricted stock awards with performance conditions. Refer to Note 4 for background on the LTIP Units.

For the three and nine months ended September 30, 2020 we recorded \$4 million and \$12 million of equity-based compensation expense, respectively, compared to \$3 million and \$10 million, respectively, during the same periods in 2019. The total unrecognized compensation expense related to awards of shares of restricted stock and restricted stock units was approximately \$14 million as of September 30, 2020. We expect to recognize compensation expense related to our equity awards over a weighted-average term of approximately 2 years. A summary of the unvested shares of restricted common stock that have been issued is as follows:

	Restricted Shares of Common Stock	Weighted Average Grant Date Fair Value <i>(per share)</i>	Value <i>(in millions)</i>
Ending Balance — December 31, 2018	1,386,756	\$ 19.00	\$ 26.4
Granted	150,493	23.99	3.6
Vested	(781,218)	18.91	(14.8)
Forfeited	(5,789)	20.62	(0.1)
Ending Balance — December 31, 2019	750,242	\$ 20.08	\$ 15.1
Granted	194,077	32.93	6.4
Vested	(576,880)	19.50	(11.3)
Forfeited	(50)	31.00	—
Ending Balance — September 30, 2020	367,389	\$ 27.77	\$ 10.2

A summary of the unvested shares of restricted stock units that have market-based vesting conditions that have been issued is as follows:

	Restricted Stock Units ⁽¹⁾	Weighted Average Grant Date Fair Value <i>(per share)</i>	Value <i>(in millions)</i>
Ending Balance — December 31, 2018	393,148	\$ 19.55	\$ 7.7
Granted	46,586	25.10	1.2
Vested	(1,380)	21.68	—
Forfeited	(2,776)	22.23	(0.1)
Ending Balance — December 31, 2019	435,578	\$ 20.12	\$ 8.8
Granted	23,342	27.18	0.6
Incremental performance shares granted	216,932	18.99	4.1
Vested	(439,986)	19.04	(8.4)
Forfeited	—	—	—
Ending Balance — September 30, 2020	235,866	\$ 21.78	\$ 5.1

(1) As discussed in Note 2, restricted stock units with market-based vesting conditions can vest between 0% and 200% subject to both the absolute performance of the Company's common stock as well as relative performance compared to a group of peers. The incremental performance shares granted relate to the vesting of an award at the 200% level.

A summary of the unvested LTIP Units that have time-based vesting conditions that have been issued is as follows:

	LTIP Units ⁽¹⁾	Weighted Average Grant Date Fair Value <i>(per share)</i>	Value <i>(in millions)</i>
Ending Balance — December 31, 2018	—	\$ —	\$ —
Granted	209,330	25.84	5.4
Vested	(8,020)	25.82	(0.2)
Forfeited	—	—	—
Ending Balance — December 31, 2019	201,310	\$ 25.84	\$ 5.2
Granted	165,346	18.56	3.1
Vested	(80,974)	25.87	(2.1)
Forfeited	—	—	—
Ending Balance — September 30, 2020	285,682	\$ 21.62	\$ 6.2

(1) See Note 4 for information on the vesting of LTIP Units.

A summary of the unvested LTIP Units that have market-based vesting conditions that have been issued is as follows:

	LTIP Units ⁽¹⁾	Weighted Average Grant Date Fair Value <i>(per share)</i>	Value <i>(in millions)</i>
Ending Balance — December 31, 2018	—	\$ —	\$ —
Granted	180,500	26.70	4.8
Vested	—	—	—
Forfeited	—	—	—
Ending Balance — December 31, 2019	180,500	\$ 26.70	\$ 4.8
Granted	132,204	12.25	1.6
Vested	—	—	—
Forfeited	—	—	—
Ending Balance — September 30, 2020	312,704	\$ 20.59	\$ 6.4

(1) See Note 4 for information on the vesting of LTIP Units. LTIP Units with market-based vesting conditions can vest between 0% and 200% subject to both the absolute performance of the Company's common stock as well as relative performance compared to a group of peers.

12. Earnings per Share of Common Stock

Both the net income or loss attributable to the non-controlling OP units and the non-controlling limited partners' outstanding OP units have been excluded from the basic earnings per share and the diluted earnings per share calculations attributable to common stockholders. Unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents (whether paid or unpaid) are participating securities and are excluded from net income available to common shareholders in the computation of earnings per share pursuant to the two-class method. Certain share-based awards are included in the diluted share count to the extent they are dilutive as discussed in Note 2. To the extent our convertible notes are dilutive under the if-converted method, we add back the interest expense to the numerator and include the weighted average shares of potential common stock over the period issuable upon conversion of the note in the denominator in calculating dilutive EPS as described in Note 2.

The computation of basic and diluted earnings per common share of common stock is as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
<i>(in millions, except share and per share data)</i>				
Numerator:				
Net income (loss) attributable to controlling stockholders and participating securities	\$ 21.2	\$ 9.1	\$ 57.5	\$ 35.5
Less: Dividends and distributions on participating securities	(0.2)	(0.3)	(0.7)	(0.9)
Net income (loss) attributable to controlling stockholders — basic	21.0	8.8	56.8	34.6
Add: Interest expense associated with convertible debt	0.1	—	0.1	—
Net income (loss) attributable to controlling stockholders — dilutive	\$ 21.1	\$ 8.8	\$ 56.9	\$ 34.6
Denominator:				
Weighted-average number of common shares — basic	74,012,788	64,922,325	71,376,004	63,492,884
Weighted-average number of common shares — diluted	76,131,252	65,630,711	72,644,626	64,147,835
Basic earnings per common share	\$ 0.28	\$ 0.14	\$ 0.80	\$ 0.55
Diluted earnings per common share	\$ 0.28	\$ 0.13	\$ 0.78	\$ 0.54
Securities being allocated a portion of earnings:				
Weighted-average number of OP units	321,261	279,415	301,582	278,202
	As of September 30,	As of September 30,		
	2020	2019		
Participating securities:				
Unvested restricted common stock and unvested LTIP Units with time-based vesting conditions	653,071	964,885		
Potentially dilutive securities as of period end:				
Unvested restricted common stock and unvested LTIP Units with time-based vesting conditions	653,071	964,885		
Restricted stock units	235,866	435,578		
LTIP Units with market-based vesting conditions	312,704	180,500		
Potential shares of common stock related to convertible notes	8,485,630	5,508,677		

13. Equity Method Investments

We have non-controlling unconsolidated equity investments in renewable energy and energy efficiency projects as well as in a joint venture that owns land with long-term triple net lease agreements to several solar projects. We recognized income (loss) from our equity method investments of approximately \$17 million and \$33 million during the three and nine months ended September 30, 2020, respectively as compared to income of approximately \$6 million and \$18 million during the three and nine months ended September 30, 2019, respectively. We describe our accounting for non-controlling equity investments in Note 2.

The following is a summary of the consolidated financial position and results of operations of the significant entities accounted for using the equity method.

	SunStrong Capital Holdings, LLC	Vivint Solar Asset 2 Class B, LLC	Other Investments ⁽¹⁾	Total
	<i>(in millions)</i>			
Balance Sheet				
<i>As of June 30, 2020</i>				
Current assets	\$ 90	\$ 8	\$ 258	\$ 356
Total assets	1,415	244	4,829	6,488
Current liabilities	48	2	251	301
Total liabilities	1,134	138	1,673	2,945
Members' equity	281	106	3,156	3,543
<i>As of December 31, 2019</i>				
Current assets	99	46	309	454
Total assets	1,335	183	3,484	5,002
Current liabilities	54	1	252	307
Total liabilities	1,010	81	908	1,999
Members' equity	325	102	2,576	3,003
Income Statement				
<i>For the six months ended June 30, 2020</i>				
Revenue	61	8	125	194
Income (loss) from continuing operations	(4)	1	(15)	(18)
Net income (loss)	(4)	1	(15)	(18)
<i>For the six months ended June 30, 2019</i>				
Revenue	46	—	72	118
Income from continuing operations (loss)	(11)	—	(15)	(26)
Net income (loss)	(11)	—	(15)	(26)

(1) Represents aggregated financial statement information for investments not separately presented.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

In this Form 10-Q, unless specifically stated otherwise or the context otherwise indicates, references to "we," "our," "us," and "HASI" refer to Hannon Armstrong Sustainable Infrastructure Capital, Inc., a Maryland corporation, Hannon Armstrong Sustainable Infrastructure, L.P., and any of our other subsidiaries. Hannon Armstrong Sustainable Infrastructure, L.P. is a Delaware limited partnership of which we are the sole general partner and to which we refer in this Form 10-Q as our "Operating Partnership." Our business is focused on reducing the impact of greenhouse gases that have been scientifically linked to climate change. We refer to these gases, which are often for consistency expressed as carbon dioxide equivalents, as carbon emissions.

The following discussion is a supplement to and should be read in conjunction with the accompanying Condensed Consolidated Financial Statements and related notes and with our Annual Report on Form 10-K for the year ended December 31, 2019, as amended by our Amendment No. 1 to our Annual Report on Form 10-K for the year ended December 31, 2019, (collectively, our "2019 Form 10-K") that was filed with the SEC.

Our Business

We make investments in climate change solutions by providing capital to leading companies in energy efficiency, renewable energy and other sustainable infrastructure markets. We believe we are one of the first U.S. public companies solely dedicated to such climate change investments. Our goal is to generate attractive returns from a diversified portfolio of projects with long-term, predictable cash flows from proven technologies that reduce carbon emissions or increase resilience to climate change.

We are internally managed, and our management team has extensive relevant industry knowledge and experience, dating back more than 30 years. We have long-standing relationships with the leading energy service companies ("ESCOs"), manufacturers, project developers, utilities, owners and operators. Our origination strategy is to use these relationships to generate recurring, programmatic investment and fee-generating opportunities. Additionally, we have relationships with leading banks, investment banks, and institutional investors from which we are referred additional investment and fee generating opportunities.

Our investments are focused on three areas:

- *Behind-The-Meter ("BTM")*: distributed building or facility projects, which reduce energy usage or cost through the use of solar generation and energy storage or energy efficiency improvements including heating, ventilation and air conditioning systems ("HVAC"), lighting, energy controls, roofs, windows, building shells, and/or combined heat and power systems;
- *Grid Connected ("GC")*: projects that deploy cleaner energy sources, such as solar and wind to generate power where the off-taker or counterparty is part of the wholesale electric power grid; and
- *Sustainable Infrastructure*: upgraded transmission and distribution systems, water and storm water infrastructure, and other projects that improve water or energy efficiency, increase resiliency, positively impact the environment or more efficiently use natural resources.

We prefer investments that use proven technology and that often have contractually committed agreements with an investment-grade rated off-taker or counterparties. In the case of BTM, the off-taker or counterparty may be the building owner or occupant, and we may be secured by the installed improvements or other real estate rights. In the case of GC, the off-taker or counterparty may be a utility or electric user who has entered into a contractually committed agreement, such as a power purchase agreement ("PPA"), to purchase power produced by a renewable energy project at a minimum price with potential price escalators for a portion of the project's estimated life.

We completed approximately \$716 million and \$1.1 billion of transactions during the three and nine months ended September 30, 2020, compared to approximately \$287 million and \$810 million during the same periods in 2019. As of September 30, 2020, pursuant to our strategy of holding transactions on our balance sheet, we held approximately \$2.2 billion of transactions on our balance sheet, which we refer to as our "Portfolio." As of September 30, 2020, our Portfolio consisted of over 205 assets and we seek to manage the diversity of our Portfolio by, among other factors, project type, project operator, type of investment, type of technology, transaction size, geography, obligor and maturity. For those transactions that we choose not to hold on our balance sheet, we transfer all or a portion of the economics of the transaction, typically using securitization trusts, to institutional investors in exchange for cash and/or residual interests in the assets and in some cases, ongoing fees. As of September 30, 2020, we managed approximately \$4.2 billion in assets in these securitization trusts or vehicles that are not consolidated on our balance sheet. When combined with our Portfolio, as of September 30, 2020, we manage approximately \$6.4 billion of assets which we refer to as our "Managed Assets". In the third quarter, we invested \$150

million and expect to invest up to a total of \$540 million in a joint venture owning 2.3 gigawatts of renewable energy projects. See Note 6 to our financial statements in this Form 10-Q for further discussion.

We make our investments utilizing a variety of structures including:

- Equity investments in either preferred or common structures in unconsolidated entities;
- Government and commercial receivables or securities, such as loans for renewable energy and energy efficiency projects; and
- Real estate, such as land or other assets leased for use by sustainable infrastructure projects typically under long-term leases.

Our equity investments in renewable energy and energy efficiency projects are operated by various renewable energy companies or by joint ventures in which we participate. These transactions allow us to participate in the cash flows associated with these projects, typically on a priority basis. Our energy efficiency debt investments are usually assigned the payment stream from the project savings and other contractual rights, often using our pre-existing master purchase agreements with the ESCOs. Our debt investments in various renewable energy or other sustainable infrastructure projects or portfolios of projects are generally secured by the installed improvements or other real estate rights. We also own, directly or through equity investments, or manage over 31,000 acres of land that are leased under long-term agreements to over 60 renewable energy projects, where our investment returns are typically senior to most project costs, debt, and equity.

While we prefer investments in which we hold a senior or preferred position in a project, as our markets evolve and grow, we are seeing increasing opportunities to invest, and have invested, in mezzanine debt or common equity in projects where we are subordinated to project debt and/or preferred forms of equity. Investing greater than 15% of our assets in any individual project requires the approval of a majority of our independent directors. We may adjust the mix and duration of our assets over time in order to allow us to manage various aspects of our portfolio, including expected risk-adjusted returns, macroeconomic conditions, liquidity, availability of adequate financing for our assets, and the maintenance of our REIT qualification and our exemption from registration as an investment company under the 1940 Act.

We have available to us a broad range of financing sources that allow us to use borrowings as part of our financing strategy to increase potential returns to our stockholders. We may finance our investments using non-recourse or recourse debt and equity. We may also decide to finance transactions through the use of off-balance sheet securitization structures where we transfer all or a portion of the economics of the transaction, typically using securitization trusts, to institutional investors in exchange for cash and/or residual interests in the assets and in some cases, ongoing fees. We have worked to expand our liquidity and access to the debt and bank loan markets and in August 2020 completed our latest issuance of senior unsecured and convertible notes.

We have a large and active pipeline of potential new opportunities that are in various stages of our underwriting process. We refer to potential opportunities as being part of our pipeline if we have determined that the project fits within our investment strategy and exhibits the appropriate risk and reward characteristics through an initial credit analysis, including a quantitative and qualitative assessment of the opportunity, as well as research on the market and sponsor. Our pipeline of transactions that could potentially close in the next 12 months consists of opportunities in which we will be the lead originator as well as opportunities in which we may participate with other institutional investors. Subsequent to our origination of the transaction discussed in Note 6 to the financial statements, our pipeline consisted of more than \$2.5 billion in new equity, debt and real estate opportunities. Of our pipeline, 62% is related to BTM assets and 27% is related to GC assets, with the remainder related to other sustainable infrastructure. There can, however, be no assurance with regard to any specific terms of such pipeline transactions or that any or all of the transactions in our pipeline will be completed.

As part of our investment process, we calculate the ratio of the estimated first year of metric tons of carbon emissions avoided by our investments divided by the capital invested to quantify the carbon impact of our investments. In this calculation, which we refer to as CarbonCount®, we use emissions factor data, expressed on a CO₂ equivalent basis, from the U.S. Government or the International Energy Administration to an estimate of a project's energy production or savings to compute an estimate of metric tons of carbon emissions avoided. Refer to Environmental Metrics below for a discussion of the carbon emissions avoided as a result of our investments. In addition to carbon, we also consider other environmental attributes, such as water use reduction, stormwater remediation benefits and stream restoration benefits.

We elected and qualified to be taxed as a REIT for U.S. federal income tax purposes, commencing with our taxable year ended December 31, 2013 and operate our business in a manner that will permit us to continue to maintain our exemption from registration as an investment company under the 1940 Act.

Factors Impacting our Operating Results

We expect that our results of operations will be affected by a number of factors and will primarily depend on the size of our Portfolio, including the mix of transactions which we hold in our Portfolio, the income we receive from securitizations, syndications and other services, our Portfolio's credit risk profile, changes in market interest rates, commodity prices, changes in climate, federal, state and/or municipal governmental policies, general market conditions in local, regional and national economies, our ability to qualify as a REIT and maintain our exemption from registration as an investment company under the 1940 Act, the impacts of climate change, and the impact of the novel coronavirus (COVID-19). We provide a summary of the factors impacting our operating results in our 2019 Form 10-K under MD&A – Factors Impacting our Operating Results as well as information on COVID-19 below.

Impact of COVID-19

The current outbreak of the novel coronavirus (COVID-19) is having an ongoing impact on the U.S., regional and global economies, the U.S. sustainable infrastructure market and the broader financial markets.

Since March, in an attempt to control COVID-19 the Federal government and most states and/or local governments, including where we have our office (Maryland) and in regions where our projects and other investments are located or where they are managed, have implemented various restrictions, rules, or guidelines including quarantines, restrictions on travel, "shelter in place", "stay at home", or "safer at home" rules, restrictions on types of business that may continue to operate, and/or restrictions on types of construction projects allowed. While some of these restrictions have been relaxed or phased out, many of these or similar restrictions remain in place, continue to be implemented, or additional restrictions are being considered. Although, in certain cases, exceptions may be available for certain essential operations and businesses which generally include the renewable energy projects in which we invest, there is no assurance that such exceptions will enable us to avoid adverse effects to our results of operations and business. Further, such actions create disruption in energy efficiency, renewable energy, real estate and other sustainable infrastructure markets and adversely impact a number of industries.

We closed our office and moved to a remote workforce in early March to help ensure the safety and productivity of our employees and help prevent the spread of COVID-19 among our workforce and in the community. We took this action early as we recognized the seriousness of the situation and wanted to protect our employees and the members of the communities in which they live and work. We have spent significant time and resources over the last several years to update our IT infrastructure and our use of the cloud to allow us to take this action. Operating as a remote workforce has not materially impacted our ability to carry out day to day operations. We have announced donations totaling \$300,000 to several Maryland charities who are providing services during the pandemic as well as to charities addressing racial inequity.

We have taken certain actions to increase liquidity, including issuing \$188 million in common stock and issuing over \$900 million of senior unsecured and convertible senior notes. We believe these actions give us ample liquidity to continue to operate our business and make investments in green projects as opportunities present themselves. See the Notes 7 and 8 to our financial statements and Liquidity and Capital Resources in this Form 10-Q for further discussion of our liquidity.

Our financial results for 2020 have not been adversely impacted by COVID-19 to a material degree. We currently have no material loan delinquencies. We believe that the cost-savings attributes of the projects in which we invest provide incentive to borrowers and other obligors to continue to make their contractual payments.

The rapid development and fluidity of the circumstances resulting from this pandemic preclude any prediction as to the ultimate adverse impact of COVID-19. Nevertheless, COVID-19 and the current financial, economic and capital markets environment, and future developments in these and other areas present material uncertainty and risk with respect to our performance, financial condition, volume of business, results of operations and cash flows. We expect to review and adjust our efforts as the circumstances and impacts of the pandemic develop and respond to the shifting business and financial landscape and heightened volatility in, among other things, financial markets as well as the general economy and the various federal, state and local guidelines on business operations. See the Risk Factors section of this Form 10-Q for additional discuss of certain potential risks to our business arising from COVID-19.

Critical Accounting Policies and Use of Estimates

Our financial statements are prepared in accordance with GAAP, which requires the use of estimates and assumptions that involve the exercise of judgment and use of assumptions as to future uncertainties. Understanding our accounting policies and the extent to which we make judgments and estimates in applying these policies is integral to understanding our financial statements. We believe the estimates and assumptions used in preparing our financial statements and related footnotes are reasonable and supportable based on the best information available to us as of September 30, 2020. The uncertainty surrounding COVID-19 may materially impact the accuracy of the estimates and assumptions used in the financial statements and related footnotes and, as a result, actual results may vary significantly from estimates.

We have identified the following accounting policies as critical because they require significant judgments and assumptions about highly complex and inherently uncertain matters and the use of reasonably different estimates and assumptions could have a material impact on our reported results of operations or financial condition. These critical accounting policies govern Variable Interest Entity Consolidation, Equity Method Investments, Impairment or the establishment of an allowance under Topic 326 for our Portfolio, and Securitization of Receivables. We evaluate our critical accounting estimates and judgments on an ongoing basis and update them, as necessary, based on changing conditions. We provide additional information on our critical accounting policies and use of estimates under Item 7. MD&A—Critical Accounting Policies and Use of Estimates in our 2019 Form 10-K and under Note 2 to our financial statements in this Form 10-Q.

Financial Condition and Results of Operations

Our Portfolio

Our Portfolio totaled approximately \$2.2 billion as of September 30, 2020 and included approximately \$1.3 billion of BTM assets and approximately \$0.9 billion of GC assets. Approximately 52% consisted of fixed-rate government and commercial receivables and debt securities, which are classified as investments, on our balance sheet. Approximately 31% of our Portfolio consisted of unconsolidated equity investments in renewable energy related projects and approximately 17% of our Portfolio was real estate leased to renewable energy projects under lease agreements. Our Portfolio consisted of over 205 transactions with an average size of \$11 million and the weighted average remaining life of our Portfolio (excluding match-funded transactions) of approximately 16 years as of September 30, 2020.

Our Portfolio included the following as of September 30, 2020:

- Equity investments in either preferred or common structures in unconsolidated entities;
- Government and commercial receivables, such as loans for renewable energy and energy efficiency projects;
- Real estate, such as land or other assets leased for use by sustainable infrastructure projects typically under long-term leases; and
- Investments in debt securities of renewable energy or energy efficiency projects.

The table below provides details on the interest rate and maturity of our receivables and debt securities as of September 30, 2020:

	Balance	Maturity
	<i>(in millions)</i>	
Fixed-rate receivables, interest rates less than 5.00% per annum	\$ 242	2021 to 2045
Fixed-rate receivables, interest rates from 5.00% to 6.50% per annum	68	2022 to 2055
Fixed-rate receivables, interest rates greater than 6.50% per annum	821	2021 to 2069
Receivables	1,131	
Allowance for loss on receivables	(31)	
Receivables, net of allowance	1,100	
Fixed-rate investments, interest rates less than 5.00% per annum	48	2035 to 2038
Fixed-rate investments, interest rates from 5.00% to 6.50% per annum	4	2030 to 2050
Total receivables and investments	\$ 1,152	

The table below presents, for the debt investments and real estate related holdings of our Portfolio and our interest-bearing liabilities, the average outstanding balances, income earned, the interest expense incurred, and average yield or cost. Our earnings from our equity method investments are not included in total revenue.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
<i>(dollars in millions)</i>				
Portfolio, excluding equity method investments				
Interest income, receivables	\$ 23	\$ 17	\$ 68	\$ 48
Average balance of receivables	1,148	906	1,152	901
Average interest rate of receivables	8.0 %	7.5 %	7.9 %	7.1 %
Interest income, investments	—	1	2	5
Average balance of investments	44	126	59	160
Average interest rate of investments	4.0 %	4.5 %	4.3 %	4.3 %
Rental income	6	6	19	19
Average balance of real estate	360	363	361	364
Average yield on real estate	7.2 %	7.1 %	7.2 %	7.1 %
Average balance of receivables, investments, and real estate	1,552	1,395	1,572	1,425
Average yield from receivables, investments, and real estate	7.7 %	7.2 %	7.6 %	6.8 %
Debt				
Interest expense	26	17	66	47
Average balance of debt	1,926	1,266	1,663	1,289
Average cost of debt	5.4 %	5.2 %	5.3 %	4.9 %

The following table provides a summary of our anticipated principal repayments for our receivables and investments as of September 30, 2020:

	Payment due by Period				
	Total	Less than 1 year	1-5 years	5-10 years	More than 10 years
<i>(in millions)</i>					
Receivables	\$ 1,100	\$ 121	\$ 173	\$ 270	\$ 536
Investments	52	5	4	14	29

See Note 6 to our financial statements in this Form 10-Q for information on:

- the anticipated maturity dates of our receivables and investments and the weighted average yield for each range of maturities as of September 30, 2020,
- the term of our leases and a schedule of our future minimum rental income under our land lease agreements as of September 30, 2020,
- the Performance Ratings of our Portfolio, and
- the receivables on non-accrual status.

For information on our residual assets relating to our securitization trusts, see Note 5 to our financial statements in this Form 10-Q. The residual assets do not have a contractual maturity date and the underlying securitized assets have contractual maturity dates until 2056.

Results of Operations

Comparison of the Three Months Ended September 30, 2020 vs. Three Months Ended September 30, 2019

	Three months ended September 30,		\$ Change	% Change
	2020	2019		
<i>(dollars in millions)</i>				
Revenue				
Interest income	\$ 23	\$ 19	\$ 4	21 %
Rental income	7	7	—	— %
Gain on sale of receivables and investments	14	8	6	75 %
Fee income	5	5	—	— %
Total Revenue	49	39	10	26 %
Expenses				
Interest expense	26	17	9	53 %
Provision for loss on receivables	3	8	(5)	(63) %
Compensation and benefits	9	7	2	29 %
General and administrative	4	4	—	— %
Total expenses	42	36	6	17 %
Income before equity method investments	7	3	4	133 %
Income (loss) from equity method investments	17	6	11	183 %
Income (loss) before income taxes	24	9	15	167 %
Income tax (expense) benefit	(2)	—	(2)	NM
Net income (loss)	\$ 22	\$ 9	\$ 13	144 %

NM—Percentage change is not meaningful.

- Net income increased by \$13 million due to a increase of \$10 million in total revenue and an increase in equity method investments income of \$11 million, offset by a \$6 million increase in total expenses and a \$2 million increase in income tax expense. These results do not reflect the non-GAAP core earnings adjustment applied to our equity method investments, which is discussed in the non-GAAP financial measures section below.
- Total revenue increased by \$10 million due to a \$4 million increase in interest income resulting from higher yielding assets in the portfolio and a higher average balance. There was a \$6 million increase in gain on sale and fee income primarily from a change in mix of assets being securitized.
- Interest expense increased by \$9 million due primarily to higher average outstanding borrowings. We recorded a \$3 million provision for loss on receivables in the current quarter due primarily to loan commitments made during the period. The \$8 million provision for loss on receivables in the prior period was the result of a court ruling in the prior year resulting in a provision for loss on receivables that were previously placed on non-accrual status in 2017.
- Compensation and benefit expense increased by \$2 million as a result of an increase in our employee headcount and incentive compensation.
- Income from equity method investments increased by \$11 million, primarily due to a higher realization of tax attributes by our co-investors which increases our HLBV allocation of earnings.
- Income tax expense increased by \$2 million primarily as a result of an increase in income from our portfolio and the recognition of tax benefits in the prior year that did not recur.

Comparison of the Nine Months Ended September 30, 2020 vs. Nine Months Ended September 30, 2019

	Nine months ended September 30,		\$ Change	% Change
	2020	2019		
<i>(dollars in millions)</i>				
Revenue				
Interest income	\$ 71	\$ 54	\$ 17	31 %
Rental income	19	19	—	— %
Gain on sale of receivables and investments	35	17	18	106 %
Fee income	13	13	—	— %
Total Revenue	138	103	35	34 %
Expenses				
Interest expense	66	47	19	40 %
Provision for loss on receivables	6	8	(2)	(25)%
Compensation and benefits	27	21	6	29 %
General and administrative	11	11	—	— %
Total expenses	110	87	23	26 %
Income before equity method investments	28	16	12	75 %
Income (loss) from equity method investments	33	18	15	83 %
Income (loss) before income taxes	61	34	27	79 %
Income tax (expense) benefit	(3)	1	(4)	(400)%
Net income (loss)	\$ 58	\$ 35	\$ 23	66 %

NM—Percentage change is not meaningful.

- Net income increased by \$23 million due to an increase of \$35 million in total revenue and \$15 million of equity method investments income being offset by a \$23 million increase in total expenses and a \$4 million increase in income tax expense. These results do not reflect the non-GAAP core earnings adjustment applied to our equity method investments, which is discussed in the non-GAAP financial measures section below.
- Total revenue increased by \$35 million due to a \$17 million increase in interest income resulting from higher yielding assets in the portfolio and a higher average balance. There was a \$18 million increase in gain on sale and fee income primarily from a change in mix of assets being securitized.
- Interest expense increased by \$19 million due to higher average outstanding borrowings and higher cost of debt. We recorded a \$6 million provision for loss on receivables during the year primarily due to loans and loan commitments made during the period. The \$8 million provision for loss on receivables in the prior period was the result of a court ruling in the prior year resulting in a provision for loss on receivables that were previously placed on non-accrual status in 2017.
- Compensation and benefit expense increased by \$6 million as a result of an increase in our employee headcount and incentive compensation.
- Income from equity method investments increased by \$15 million, primarily due to a higher realization of tax attributes by our co-investors which increases our HLBV allocation of earnings.
- Income tax expense increased by \$4 million primarily as a result of an increase in income from our portfolio and the recognition of tax benefits in the prior year that did not recur.

Non-GAAP Financial Measures

We consider the following non-GAAP financial measures useful to investors as key supplemental measures of our performance: (1) core earnings, (2) core net investment income, and (3) managed assets. These non-GAAP financial measures should be considered along with, but not as alternatives to, net income or loss as measures of our operating performance. These non-GAAP financial measures, as calculated by us, may not be comparable to similarly named financial measures as reported by other companies that do not define such terms exactly as we define such terms.

Core Earnings

We calculate core earnings as GAAP net income (loss) excluding non-cash equity compensation expense, certain provisions for loss on receivable, amortization of intangibles, any one-time acquisition related costs or non-cash tax charges and the earnings attributable to our non-controlling interest of our Operating Partnership. We also make an adjustment to our equity method investments in the renewable energy projects as described below. In the future, core earnings may also exclude one-time events pursuant to changes in GAAP and certain other non-cash charges as approved by a majority of our independent directors.

Certain of our equity method investments in renewable energy and energy efficiency projects are structured using typical partnership “flip” structures where the investors with cash distribution preferences receive a pre-negotiated return consisting of priority distributions from the project cash flows, in many cases, along with tax attributes. Once this preferred return is achieved, the partnership “flips” and the common equity investor, often the operator or sponsor of the project, receives more of the cash flows through its equity interests while the previously preferred investors retain an ongoing residual interest. We have made investments in both the preferred and common equity of these structures. Regardless of the nature of our equity interest, we typically negotiate the purchase prices of our equity investments, which have a finite expected life, based on our assessment of the expected cash flows we will receive from these projects discounted back to the net present value, based on a target investment rate, with the expected cash flows to be received in the future reflecting both a return on the capital (at the investment rate) and a return of the capital we have committed to the project. We use a similar approach in the underwriting of our receivables.

Under GAAP, we account for these equity method investments utilizing the HLBV method. Under this method, we recognize income or loss based on the change in the amount each partner would receive, typically based on the negotiated profit and loss allocation, if the assets were liquidated at book value, after adjusting for any distributions or contributions made during such quarter. The HLBV allocations of income or loss may be impacted by the receipt of tax attributes, as tax equity investors are allocated losses in proportion to the tax benefits received, while the sponsors of the project are allocated gains of a similar amount. In addition, the agreed upon allocations of the project’s cash flows may differ materially from the profit and loss allocation used for the HLBV calculations.

The cash distributions for those equity method investments where there is an unequal allocation of tax attributes are segregated into a return on and return of capital on our cash flow statement based on the cumulative income (loss) that has been allocated using the HLBV method. However, as a result of the application of the HLBV method, including the impact of tax allocations, the high levels of depreciation and other non-cash expenses that are common to renewable energy projects and the differences between the agreed upon profit and loss and the cash flow allocations, the distributions and thus the economic returns (i.e. return on capital) achieved from the investment are often significantly different from the income or loss that is allocated to us under the HLBV method. Thus, in calculating core earnings, for certain of these investments where there are characteristics as described above, we further adjust GAAP net income (loss) to take into account our calculation of the return on capital (based upon the investment rate) from our renewable energy equity method investments, as adjusted to reflect the performance of the project and the cash distributed. We believe this core equity method investment adjustment to our GAAP net income (loss) in calculating our core earnings measure is an important supplement to the HLBV income allocations determined under GAAP for an investor to understand the economic performance of these investments where HLBV income can differ substantially from the economic returns.

The following table provides results related to our equity method investments for the three and nine months ended September 30, 2020 and 2019.

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
	<i>(in millions)</i>			
Income (loss) under GAAP	\$ 17	\$ 6	\$ 33	\$ 18
Core earnings	\$ 13	\$ 10	\$ 40	\$ 29
Return of capital	16	11	95	46
Cash collected	29	21	135	75

We believe that core earnings provides an additional measure of our core operating performance by eliminating the impact of certain non-cash expenses and facilitating a comparison of our financial results to those of other comparable companies with fewer or no non-cash charges and comparison of our own operating results from period to period. Our management uses core

earnings in this way. We believe that our investors also use core earnings, or a comparable supplemental performance measure, to evaluate and compare our performance to that of our peers, and as such, we believe that the disclosure of core earnings is useful to our investors.

However, core earnings does not represent cash generated from operating activities in accordance with GAAP and should not be considered as an alternative to net income (loss) (determined in accordance with GAAP), or an indication of our cash flow from operating activities (determined in accordance with GAAP), or a measure of our liquidity, or an indication of funds available to fund our cash needs, including our ability to make cash distributions. In addition, our methodology for calculating core earnings may differ from the methodologies employed by other companies to calculate the same or similar supplemental performance measures, and accordingly, our reported core earnings may not be comparable to similar metrics reported by other companies.

We adopted Topic 326 on January 1, 2020 which requires us to recognize a provision for loss on receivables expected over the life of a receivable rather than probable incurred losses. See Note 2 and Note 6 to our financial statements in this Form 10-Q for a discussion of the adoption of Topic 326 and its impact. We provide below core earnings which reflects the Topic 326 provision. To provide comparable metrics to periods prior to the adoption of Topic 326, we have also provided core earnings which adds back the Topic 326 provision for loss on receivables. We believe that providing a comparable metric to prior periods allows users of the financial statements to understand the impact this new accounting standard will have on our results of operations.

The table below provides a reconciliation of our GAAP net income (loss) to core earnings for the three and nine months ended September 30, 2020 and 2019.

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020		2019		2020		2019	
	\$	Per Share	\$	Per Share	\$	Per Share	\$	Per Share
<i>(dollars in thousands, except per share amounts)</i>								
Net income (loss) attributable to controlling stockholders ⁽¹⁾	\$ 21,175	\$ 0.28	\$ 9,102	\$ 0.13	\$ 57,491	\$ 0.78	\$ 35,487	\$ 0.54
Core earnings adjustments:								
Reverse GAAP (income) loss from equity method investments	(16,506)		(5,984)		(32,505)		(18,114)	
Add back core equity method investments earnings	13,258		9,715		40,361		28,857	
Non-cash equity-based compensation charges	4,091		3,395		11,615		10,384	
Non-cash provision for loss on receivables before adoption of Topic 326	—		8,027		—		8,027	
Amortization of intangibles	823		823		2,469		2,462	
Non-cash provision (benefit) for income taxes	2,345		132		2,860		(1,304)	
Current year earnings attributable to non-controlling interest	102		74		255		191	
Core earnings (Including Topic 326 provision) ⁽²⁾	\$ 25,288	\$ 0.33	\$ 25,284	\$ 0.38	\$ 82,546	\$ 1.12	\$ 65,990	\$ 1.01
Add back provision for loss on receivables under Topic 326 ⁽³⁾	2,458		—		5,629		—	
Core earnings (pre-Topic 326 provision) ⁽²⁾	\$ 27,746	\$ 0.36	\$ 25,284	\$ 0.38	\$ 88,175	\$ 1.19	\$ 65,990	\$ 1.01

(1) This is the GAAP diluted earnings per share and is the most comparable GAAP measure to our core earnings per share.

(2) Core earnings per share are based on 77,041,509 shares and 73,819,517 shares and for the three and nine months ended September 30, 2020, respectively, and 66,785,779 shares and 65,425,114 shares for the three and nine months ended September 30, 2019, respectively, which represents the weighted average number of fully-diluted shares outstanding including our restricted stock awards, restricted stock units, long-term incentive plan units, and the non-controlling interest in our Operating Partnership. We include any potential common stock issuance in this calculation related to our

convertible notes using the treasury stock method and any potential common stock issuances related to share based compensation units in the amount we believe is reasonably certain to vest. We believe the use of the treasury stock method is an appropriate representation of the potential dilution when considering the economic behaviors of the holders of the instrument.

(3) As discussed above, to provide a comparable metric to prior year metrics we are adding back the provision for loss on receivables recognized under Topic 326 in the year of adoption.

Core net investment income

We have a portfolio of investments in climate change solutions which we finance using a combination of debt and equity. We calculate core net investment income by adjusting GAAP net investment income for those core earnings adjustments described above which impact investment income. We believe that this measure is useful to investors as it shows the recurring income generated by our portfolio after the associated interest cost of debt financing. Our management also uses core net investment income in this way. Our non-GAAP core net investment income measure may not be comparable to similarly titled measures used by other companies.

The following is a reconciliation of our GAAP net investment income to our core net investment income:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
	<i>(in thousands)</i>			
Interest income	\$ 23,508	\$ 19,322	\$ 71,046	\$ 54,270
Rental income	6,469	6,469	19,408	19,415
GAAP investment revenue	29,977	25,791	90,454	73,685
Interest expense	26,085	16,561	65,884	46,861
GAAP net investment income	3,892	9,230	24,570	26,824
Core equity method earnings adjustment	13,258	9,715	40,361	28,857
Amortization of real estate intangibles	772	772	2,317	2,310
Core net investment income	\$ 17,922	\$ 19,717	\$ 67,248	\$ 57,991

Managed Assets

As we both consolidate assets on our balance sheet and securitize assets off-balance sheet, certain of our receivables and other assets are not reflected on our balance sheet where we may have a residual interest in the performance of the investment, such as servicing rights or a retained interest in cash flows. Thus, we present our investments on a non-GAAP "Managed Assets" basis, which assumes that securitized receivables are not sold. We believe that our Managed Asset information is useful to investors because it portrays the amount of both on- and off-balance sheet receivables that we manage, which enables investors to understand and evaluate the credit performance associated with our portfolio of receivables, investments and residual assets in off-balance sheet securitized receivables. Our management also uses Managed Assets in this way. Our non-GAAP Managed Assets measure may not be comparable to similarly titled measures used by other companies.

The following is a reconciliation of our GAAP Portfolio to our Managed Assets:

	As of	
	September 30, 2020	December 31, 2019
	<i>(dollars in millions)</i>	
Equity method investments	\$ 719	\$ 499
Government receivables	251	263
Commercial receivables, net of allowance	849	896
Real estate	360	362
Investments	52	75
Assets held in securitization trusts	4,195	4,101
Managed Assets	\$ 6,426	\$ 6,196
Losses on receivables as a percentage of assets under management ⁽¹⁾	0.0 %	0.0 %

(1) Losses include either receivables written off or specifically identified as where we have substantial doubt on our ability to recover our investment.

Other Metrics

Portfolio Yield

We calculate portfolio yield as the weighted average underwritten yield of the investments in our Portfolio as of the end of the period. Underwritten yield is the rate at which we discount the expected cash flows from the assets in our Portfolio to determine our purchase price. In calculating underwritten yield, we make certain assumptions, including the timing and amounts of cash flows generated by our investments, which may differ from actual results, and may update this yield to reflect our most current estimates of project performance. We believe that portfolio yield provides an additional metric to understand certain characteristics of our Portfolio as of a point in time. Our management uses portfolio yield this way and we believe that our investors use it in a similar fashion to evaluate certain characteristics of our Portfolio compared to our peers, and as such, we believe that the disclosure of portfolio yield is useful to our investors.

Our Portfolio totaled approximately \$2.2 billion as of September 30, 2020. Unlevered portfolio yield was 7.7% and 7.6% as of September 30, 2020 and December 31, 2019, respectively. See Note 6 to our financial statements and MD&A - Our Business in this Form 10-Q for additional discussion of the characteristics of our portfolio as of September 30, 2020.

Environmental Metrics

As part of our investment process, we calculate the ratio of the estimated first year of metric tons of carbon emissions avoided by our investments divided by the capital invested to understand the impact our investments are having on climate change. In this calculation, which we refer to as CarbonCount®, we apply emissions factor data from the U.S. Government or the International Energy Administration to an estimate of a project's energy production or savings to compute an estimate of metric tons of carbon emissions avoided. We estimate that our investments originated during the quarter ended September 30, 2020, will reduce annual carbon emissions by approximately 1,192,000 metric tons, equating to a CarbonCount® of 1.67. We estimate that our investments made since 2013 have cumulatively reduced annual carbon emissions by over 4 million metric tons.

Liquidity and Capital Resources

Liquidity is a measure of our ability to meet potential short term (within one year) and long term cash requirements, including ongoing commitments to repay borrowings, fund and maintain our current and future assets, make distributions to our stockholders and other general business needs. We will use significant cash to make investments in sustainable infrastructure, repay principal and interest on our borrowings, make distributions to our stockholders and fund our operations. We use borrowings as part of our financing strategy to increase potential returns to our stockholders and have available to us a broad range of financing sources. We finance our investments primarily with non-recourse or recourse debt, equity and off-balance sheet securitization structures.

We believe we have substantial liquidity as of September 30, 2020, with unrestricted cash balances of \$881 million compared to \$6 million as of December 31, 2019. We have been able to successfully access the equity markets, raising approximately \$188 million under our "at-the-market" equity distribution program (our "ATM program") during the nine months ended September 30, 2020. During 2020, we have issued \$775 million principal amount of senior unsecured notes and \$144 million of convertible notes to further enhance our liquidity position. We have no material maturities of non-amortizing recourse debt until 2022.

We have two senior secured revolving credit facilities ("Rep-Based Facility" and "Approval-Based Facility") with several lenders with a combined maximum commitment of \$450 million. For additional information on our credit facilities, see Note 7 to our financial statements in this Form 10-Q. As of September 30, 2020, we had approximately \$613 million of non-recourse borrowings. We have \$1.3 billion of senior unsecured notes and \$294 million of convertible notes outstanding. We also continue to utilize off-balance sheet securitization transactions, where we transfer the loans or other assets we originate to securitization trusts or other bankruptcy remote special purpose funding vehicles that are not consolidated on our balance sheet. We have continued to complete gain on sale securitization transactions with large institutional investors such as life insurance companies throughout 2020. As of September 30, 2020, the outstanding principal balance of our assets financed through the use of these off-balance sheet transactions was approximately \$4.2 billion.

Large institutional investors have provided the financing for our on and off-balance sheet financings. We have worked to expand our liquidity and access to the debt and bank loan markets and have entered into transactions with a number of new institutional investors in the last year. For further information on the credit facilities, senior unsecured notes, asset backed non-recourse debt, convertible notes, and securitizations, see Notes 5, 7 and 8 to our financial statements of this Form 10-Q.

We plan to raise additional equity capital and continue to use fixed and floating rate borrowings which may be in the form of additional bank credit facilities (including term loans and revolving facilities), warehouse facilities, repurchase agreements,

public and private debt issuances as a means of financing our business. We also expect to use both on-balance sheet and off-balance sheet securitizations. We may also consider the use of separately funded special purpose entities or funds to allow us to expand the investments that we make or to manage the Portfolio diversification.

The decision on how we finance specific assets or groups of assets is largely driven by risk and portfolio and financial management considerations, including the potential for gain on sale or fee income, as well as the overall interest rate environment, prevailing credit spreads and the terms of available financing and market conditions. During periods of market disruptions, certain sources of financing may be more readily accessible than others which may impact our financing decisions. Over time, as market conditions change, we may use other forms of debt and equity in addition to these financing arrangements.

The amount of leverage we may deploy for particular assets will depend upon the availability of particular types of financing and our assessment of the credit, liquidity, price volatility and other risks of those assets, the interest rate environment and the credit quality of our financing counterparties. As shown in the table below, our debt to equity ratio was approximately 2.0 to 1 as of September 30, 2020, below our leverage limit of 2.5 to 1. Our percentage of fixed rate debt was approximately 99% as of September 30, 2020, which is within our targeted fixed rate debt percentage range of 75% to 100%.

The calculation of our fixed-rate debt and leverage is shown in the chart below:

	September 30, 2020 <i>(dollars in millions)</i>	% of Total	December 31, 2019 <i>(dollars in millions)</i>	% of Total
Floating-rate borrowings	\$ 23	1 %	\$ 33	2 %
Fixed-rate debt	2,168	99 %	1,360	98 %
Total debt ⁽¹⁾	\$ 2,191	100 %	\$ 1,393	100 %
Equity	\$ 1,098		\$ 940	
Leverage	2.0 to 1		1.5 to 1	

(1) Floating-rate borrowings include borrowings under our floating-rate credit facilities, and approximately \$2 million of non-recourse debt with floating rate exposure as of December 31, 2019. Fixed-rate debt also includes the present notional value of non-recourse debt that is hedged using interest rate swaps. Debt excludes securitizations that are not consolidated on our balance sheet.

We intend to use leverage for the primary purpose of financing our Portfolio and business activities and not for the purpose of speculating on changes in interest rates. While we may temporarily exceed the leverage limit, if our board of directors approves a material change to this limit, we anticipate advising our stockholders of this change through disclosure in our periodic reports and other filings under the Exchange Act.

While we generally intend to hold our target assets that we do not securitize upon acquisition as long term investments, certain of our investments may be sold in order to manage our interest rate risk and liquidity needs, to meet other operating objectives and to adapt to market conditions. The timing and impact of future sales of receivables and investments, if any, cannot be predicted with any certainty.

We believe these identified sources of liquidity in addition to our cash on hand will be adequate for purposes of meeting our short-term and long-term liquidity needs, which include funding future investments, debt service, operating costs and distributions to our stockholders. To qualify as a REIT, we must distribute annually at least 90% of our REIT's taxable income without regard to the deduction for dividends paid and excluding net capital gains. These dividend requirements limit our ability to retain earnings and thereby replenish or increase capital for growth and our operations.

Sources and Uses of Cash

We had approximately \$905 million and \$107 million of unrestricted cash, cash equivalents, and restricted cash as of September 30, 2020 and December 31, 2019, respectively.

Cash flows relating to operating activities

Net cash provided by operating activities was approximately \$52 million for the nine months ended September 30, 2020, driven primarily by net income of \$58 million and adjustments for non-cash and other items of \$6 million. The non-cash and other adjustments consisted of increases of \$6 million related to provision for loss on receivables, \$14 million related to equity method investments, \$3 million of depreciation and amortization, \$6 million of amortization of financing costs, \$6 million in accounts payable and accrued expenses, and \$12 million related to equity-based compensation. These were offset by \$28 million related to gains on securitizations and \$25 million related to other items.

Net cash provided by operating activities was approximately \$32 million for the nine months ended September 30, 2019, driven primarily by net income of \$36 million, offset by adjustments for non-cash and other items of \$4 million. The non-cash and other adjustments consisted of increases of \$8 million related to the provision for loss on receivables, \$4 million related to equity method investments, \$3 million of depreciation and amortization, \$5 million of amortization of deferred financing costs, and \$10 million related to equity-based compensation. These were offset by \$15 million related to gains on securitizations and \$19 million related to changes in accounts payable and accrued expenses and other items.

Cash flows relating to investing activities

Net cash used in investing activities was approximately \$138 million for the nine months ended September 30, 2020. We made \$115 million of investments in receivables and fixed rate debt-securities, funded escrow accounts for \$8 million and made \$323 million of equity method investments. We collected \$91 million from equity method investments representing the return of capital determined under GAAP, \$97 million from receivables and fixed rate debt-securities, \$110 million from the sales of financial assets, and received \$10 million from escrow accounts and other items.

Net cash provided by investing activities was approximately \$1 million for the nine months ended September 30, 2019. We made \$296 million of investments in receivables and fixed rate debt-securities, funded escrow accounts for \$29 million, and made \$48 million of equity method investments. We collected \$53 million from equity method investments representing the return of capital determined under GAAP, \$54 million from receivables and fixed rate debt-securities, \$226 million from the sales of financial assets, \$8 million from the sale of equity method investments, and received \$32 million from escrow accounts and other items.

Cash flows relating to financing activities

Net cash provided by financing activities was approximately \$885 million for the nine months ended September 30, 2020. We borrowed \$126 million from our credit facilities, had non-recourse debt borrowings of \$16 million, issued \$771 million of senior unsecured notes and \$144 million of convertible notes, and received \$188 million of net proceeds from issuances of common stock. We made \$119 million of principal payments on non-recourse debt, \$135 million of principal payments on credit facilities, paid \$17 million for withholding requirements as a result of the vesting of employee shares and paid \$89 million of dividends, distributions and other items.

Net cash provided by financing activities was approximately \$138 million for the nine months ended September 30, 2019. We had non-recourse debt borrowings of \$35 million, borrowings from our credit facilities of \$102 million, issued \$507 million of senior unsecured notes, and received \$97 million of net proceeds from the issuance of common stock. We made \$181 million of principal payments on non-recourse debt, \$322 million of principal payments on credit facilities, and \$19 million of payments on deferred funding obligations, spent \$9 million to purchase shares related to employees withholdings, and paid \$72 million of dividends, distributions and other.

Off-Balance Sheet Arrangements

We have relationships with non-consolidated entities or financial partnerships, such as entities often referred to as structured investment vehicles, or special purpose or variable interest entities, established to facilitate the sale of securitized assets. Other than our securitization assets (including any outstanding servicer advances) of approximately \$147 million as of September 30, 2020, that may be at risk in the event of defaults or prepayments in our securitization trusts and as discussed below, and except as disclosed in Note 9 to our financial statements in this Form 10-Q, we have not guaranteed any obligations of non-consolidated entities or entered into any commitment or intent to provide additional funding to any such entities. A more detailed description of our relations with non-consolidated entities can be found in Note 2 of our financial statements in this Form 10-Q.

In connection with some of our transactions, we have provided certain limited guaranties to other transaction participants covering the accuracy of certain limited representations, warranties or covenants and provided an indemnity against certain losses from "bad acts" including fraud, failure to disclose a material fact, theft, misappropriation, voluntary bankruptcy or unauthorized transfers. We have also guaranteed our compliance with certain tax matters, such as negatively impacting the investment tax credit and certain other obligations in the event of a change in ownership or our exercising certain protective rights.

Dividends

U.S. federal income tax law generally requires that a REIT distribute annually at least 90% of its REIT taxable income, without regard to the deduction for dividends paid and excluding net capital gains, and that it pays tax at regular corporate rates to the extent that it annually distributes less than 100% of its REIT taxable income. Our current policy is to pay quarterly distributions, which on an annual basis will equal or exceed substantially all of our REIT taxable income. The taxable income of the REIT can vary from our GAAP earnings due to a number of different factors, including, the book to tax timing differences of income and expense recognition from our transactions as well as the amount of taxable income of our TRS distributed to the REIT. See Note 10 to our financial statements in our Form 10-K regarding the amount of our distributions that have been taxed as ordinary income to our stockholders.

Any distributions we make will be at the discretion of our board of directors and will depend upon, among other things, our actual results of operations. These results and our ability to pay distributions will be affected by various factors, including the net interest and other income from our portfolio, our operating expenses and any other expenditures. In the event that our board of directors determines to make distributions in excess of the income or cash flow generated from our assets, we may make such distributions from the proceeds of future offerings of equity or debt securities or other forms of debt financing or the sale of assets. To the extent that in respect of any calendar year, cash available for distribution is less than our taxable income, or our declared distribution we could be required to sell assets, borrow funds, or raise additional capital to make cash distributions or make a portion of the required distribution in the form of a taxable stock distribution or distribution of debt securities. We will generally not be required to make distributions with respect to activities conducted through our domestic TRS.

To the extent that we generate taxable income, distributions to our stockholders generally will be taxable as ordinary income, although all or a portion of such distributions may be designated by us as a qualified dividend or capital gain. Beginning in 2018 (and through taxable years ending in 2025), a deduction is permitted for certain pass-through business income, including “qualified REIT dividends” (generally, dividends received by a REIT shareholder that are not designated as capital gain dividends or qualified dividend income), which will allow U.S. individuals, trusts, and estates to deduct up to 20% of such amounts, subject to certain limitations, resulting in an effective maximum U.S. federal income tax rate of 29.6% on such qualified REIT dividends. In the event we make distributions to our stockholders in excess of our taxable income, the excess will constitute a return of capital. In addition, a portion of such distributions may be taxable stock dividends payable in our shares. We will furnish annually to each of our stockholders a statement setting forth distributions paid during the preceding year and their characterization as ordinary income, return of capital, qualified dividend income or capital gain.

The dividends declared in 2019 and 2020 are described under Note 11 to our financial statements in this Form 10-Q.

Book Value Considerations

As of September 30, 2020, we carried only our investments and residual assets in securitized financial assets at fair value on our balance sheet. As a result, in reviewing our book value, there are a number of important factors and limitations to consider. Other than our investments and the residual assets in securitized financial assets that are carried on our balance sheet at fair value as of September 30, 2020, the carrying value of our remaining assets and liabilities are calculated as of a particular point in time, which is largely determined at the time such assets and liabilities were added to our balance sheet using a cost basis in accordance with GAAP. As such, our remaining assets and liabilities do not incorporate other factors that may have a significant impact on their value, most notably any impact of business activities, changes in estimates, or changes in general economic conditions, interest rates or commodity prices since the dates the assets or liabilities were initially recorded. Accordingly, our book value does not necessarily represent an estimate of our net realizable value, liquidation value or our market value.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We anticipate that our primary market risks will be related to the credit quality of our counterparties and project companies, market interest rates, the liquidity of our assets, commodity prices, and environmental factors. We will seek to manage these risks while, at the same time, seeking to provide an opportunity to stockholders to realize attractive returns through ownership of our common stock. Many of these risks have been magnified due to the continuing economic disruptions caused by the COVID-19 pandemic; however, while we continue to monitor the pandemic its impact on such risks remains uncertain and difficult to predict

Credit Risks

We source and identify quality opportunities within our broad areas of expertise and apply our rigorous underwriting processes to our transactions, which, we believe, will generally enable us to minimize our credit losses and maintain access to attractive financing. In the case of various renewable energy and other sustainable infrastructure projects, we will be exposed to

the credit risk of the obligor of the project's PPA or other long-term contractual revenue commitments, as well as to the credit risk of certain suppliers and project operators. While we do not anticipate facing significant credit risk in our assets related to government energy efficiency projects, we are subject to varying degrees of credit risk in these projects in relation to guarantees provided by ESCOs where payments under energy savings performance contracts are contingent upon achieving pre-determined levels of energy savings. We are exposed to credit risk in our other projects that do not benefit from governments as the obligor such as on balance sheet financing of projects undertaken by universities, schools and hospitals, as well as privately owned commercial projects. Our level of credit risk has increased, and is expected to continue to increase, as our strategy contemplates additional investments in mezzanine debt and equity. We seek to manage credit risk through thorough due diligence and underwriting processes, strong structural protections in our transaction agreements with customers and continual, active asset management and portfolio monitoring. Nevertheless, unanticipated credit losses could occur and during periods of economic downturn in the global economy, our exposure to credit risks from obligors increases, and our efforts to monitor and mitigate the associated risks may not be effective in reducing our credit risks.

We utilize a risk rating system to evaluate projects that we target. We first evaluate the credit rating of the obligors involved in the project using an average of the external credit ratings for an obligor, if available, or an estimated internal rating based on a third-party credit scoring system. We then estimate the probability of default and estimated recovery rate based on the obligors' credit ratings and the terms of the contract. We also review the performance of each investment, including through, as appropriate, a review of project performance, monthly payment activity and active compliance monitoring, regular communications with project management and, as applicable, its obligors, sponsors and owners, monitoring the financial performance of the collateral, periodic property visits and monitoring cash management and reserve accounts. The results of our reviews are used to update the project's risk rating as necessary. Additional detail of the credit risks surrounding our Portfolio can be found in Note 6 to our financial statements in this Form 10-Q.

Interest Rate and Borrowing Risks

Interest rate risk is highly sensitive to many factors, including governmental monetary and tax policies, domestic and international economic and political considerations and other factors beyond our control.

We are subject to interest rate risk in connection with new asset originations and our borrowings, including our credit facilities, and in the future, any new floating rate assets, credit facilities or other borrowings. Because short-term borrowings are generally short-term commitments of capital, lenders may respond to market conditions, making it more difficult for us to secure continued financing. If we are not able to renew our then existing borrowings or arrange for new financing on terms acceptable to us, or if we default on our covenants or are otherwise unable to access funds under any of these borrowings, we may have to curtail our origination of new assets and/or dispose of assets. We face particular risk in this regard given that we expect many of our borrowings will have a shorter duration than the assets they finance. Increasing interest rates may reduce the demand for our investments while declining interest rates may increase the demand. Both our current and future credit facilities and other borrowings may be of limited duration and are periodically refinanced at then current market rates. We attempt to reduce interest rate risks and to minimize exposure to interest rate fluctuations through the use of fixed rate financing structures, when appropriate, whereby we seek to (1) match the maturities of our debt obligations with the maturities of our assets, (2) borrow at fixed rates for a period of time, or (3) match the interest rates on our assets with like-kind debt (i.e., we may finance floating rate assets with floating rate debt and fixed-rate assets with fixed-rate debt), directly or through the use of interest rate swap agreements, interest rate cap agreements or other financial instruments, or through a combination of these strategies. We expect these instruments will allow us to minimize, but not eliminate, the risk that we must refinance our liabilities before the maturities of our assets and to reduce the impact of changing interest rates on our earnings. In addition to the use of traditional derivative instruments, we also seek to mitigate interest rate risk by using securitizations, syndications and other techniques to construct a portfolio with a staggered maturity profile. We monitor the impact of interest rate changes on the market for new originations and often have the flexibility to negotiate the term of our investments to offset interest rate increases.

Typically, our long-term debt is at fixed rates or we have used interest rate hedges that convert most of the floating rate debt to fixed rate. If interest rates rise, and our fixed rate debt balance remains constant, we expect the fair value of our fixed rate debt to decrease and the value of our hedges on floating rate debt to increase. See Note 3 to our financial statements in this Form 10-Q for the estimated fair value of our fixed rate long-term debt, which is based on having the same debt service requirements that could have been borrowed at the date presented, at prevailing current market interest rates.

Our credit facilities are variable rate lines of credit with approximately \$23 million outstanding as of September 30, 2020. Increases in interest rates would result in higher interest expense while decreases in interest rates would result in lower interest expense. As described above, we may use various financing techniques including interest rate swap agreements, interest rate cap agreements or other financial instruments, or a combination of these strategies to mitigate the variable interest nature of these facilities. A 50 basis point increase in LIBOR would increase the quarterly interest expense related to the \$23 million in variable rate borrowings by \$28 thousand. Such hypothetical impact of interest rates on our variable rate borrowings does not consider the effect of any change in overall economic activity that could occur in a rising interest rate environment. Further, in

the event of such a change in interest rates, we may take actions to further mitigate our exposure to such a change. However, due to the uncertainty of the specific actions that would be taken and their possible effects, the analysis assumes no changes in our financial structure.

We record certain of our assets at fair value in our financial statements and any changes in the discount rate would impact the value of these assets. See Note 3 to our financial statements in this Form 10-Q.

Liquidity and Concentration Risk

The assets that comprise our asset portfolio are not and are not expected to be publicly traded. A portion of these assets may be subject to legal and other restrictions on resale or will otherwise be less liquid than publicly-traded securities. The illiquidity of our assets may make it difficult for us to sell such assets if the need or desire arises, including in response to changes in economic and other conditions. Certain of the projects in which we invest have one obligor and thus we are subject to concentration risk for these investments and could incur significant losses if any of these projects perform poorly or if we are required to write down the value of any of these projects. Many of our assets, or the collateral supporting those assets, are concentrated in certain geographic areas, which may make those assets or the related collateral more susceptible to natural disasters or other regional events. See also "Credit Risks" discussed above.

Commodity Price Risk

When we make equity or debt investments for a renewable energy project that acts as a substitute for an underlying commodity, we may be exposed to volatility in prices for that commodity. The performance of renewable energy projects that produce electricity can be impacted by volatility in the market prices of various forms of energy, including electricity, coal and natural gas. This is especially true for utility scale projects that sell power on a wholesale basis such as many of our GC projects as opposed to BTM projects which compete against the retail or delivered costs of electricity which includes the cost of transmitting and distributing the electricity to the end user.

Although we generally focus on renewable energy projects that have the majority of their operating cash flow supported by long-term PPAs or leases, many of our projects have shorter term contracts (which may have the potential of producing higher current returns) or sell their power in the open market on a merchant basis, the cash flows of such projects, and thus the repayment of, or the returns available for, our assets, are subject to risk if energy prices change. We also attempt to mitigate our exposure through structural protections. These structural protections, which are typically in the form of a preferred return mechanism, are designed to allow recovery of our capital and an acceptable return over time. When structuring and underwriting these transactions, we evaluate these transactions using a variety of scenarios, including natural gas prices remaining low for an extended period of time. Despite these protections, as low natural gas prices continue or PPAs expire, the cash flows from certain of our projects are exposed to these market conditions and we work with the projects sponsors to minimize any impact as part of our on-going active asset management and portfolio monitoring. In the case of utility scale solar projects, we focus on owning the land under the project where our rent is paid out of project operational costs before the debt or equity in the project receives any payments.

We believe the current low prices in natural gas will increase demand for some types of our projects, such as combined heat and power, but may reduce the demand for other projects such as renewable energy that may be a substitute for natural gas. We seek to structure our energy efficiency investments so that we typically avoid exposure to commodity price risk. However, volatility in energy prices may cause building owners and other parties to be reluctant to commit to projects for which repayment is based upon a fixed monetary value for energy savings that would not decline if the price of energy declines.

Environmental Risks

Our business is impacted by the effects of climate change and various related regulatory responses. We discuss the risks and opportunities associated with the impacts of climate change in our Form 10-K Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Impact of climate change on our future operations. This discussion outlines potential qualitative impacts to our business, quantitative illustrations of sensitivity as well as our strategy and resilience to these risks and opportunities.

Risk Management

Our ongoing active asset management and portfolio monitoring processes provide investment oversight and valuable insight into our origination, underwriting and structuring processes. These processes create value through active monitoring of the state of our markets, enforcement of existing contracts and asset management. As described above, we engage in a variety of interest rate management techniques that seek to mitigate the economic effect of interest rate changes on the values of, and returns on, some of our assets. While we have either written off or specifically identified only two transactions amounting to approximately \$19 million (net of recoveries) on the approximately \$8 billion of transactions we originated since 2012, which represents an aggregate loss of approximately 0.2% on cumulative transactions originated over this time period, there can be no

assurance that we will continue to be as successful, particularly as we invest in more credit sensitive assets or more equity investments and engage in increasing numbers of transactions with obligors other than U.S. federal government agencies. We seek to manage credit risk using thorough due diligence and underwriting processes, strong structural protections in our loan agreements with customers and continual, active asset management and portfolio monitoring. Additionally, we have established a Finance and Risk Committee of our board of directors which discusses and reviews policies and guidelines with respect to our risk assessment and risk management for various risks, including, but not limited to, our interest rate, counter party, credit, capital availability, and refinancing risks. As it relates to environmental risks, when we underwrite and structure our investments the environmental risks and opportunities are an integral consideration to our investment parameters. While we cannot fully protect our investments, we seek to mitigate these risks by using third-party experts to conduct engineering and weather analysis and insurance reviews as appropriate. Once a transaction has closed we continue to monitor the environmental risks to the portfolio. We further discuss our strategy to managing these risks in our Form 10-K, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Impact of climate change on our future operations.

Item 4. Controls and Procedures

The Company's Chief Executive Officer and Chief Financial Officer, based on their evaluation of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) required by paragraph (b) of Rule 13a-15 or Rule 15d-15, have concluded that as of September 30, 2020, the Company's disclosure controls and procedures were effective to give reasonable assurance to the timely collection, evaluation and disclosure of information relating to the Company that would potentially be subject to disclosure under the Exchange Act and the rules and regulations promulgated thereunder.

Notwithstanding the foregoing, a control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that it will detect or uncover failures within the Company to disclose material information otherwise required to be set forth in our periodic reports.

Changes in Internal Controls over Financial Reporting

There have been no changes in the Company's "internal control over financial reporting" (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the three-month period ended September 30, 2020, that have materially affected, or was reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may be involved in various claims and legal actions in the ordinary course of business. As of September 30, 2020, we are not currently subject to any legal proceedings that are likely to have a material adverse effect on our financial position, results of operations or cash flows.

Item 1A. Risk Factors

Except as updated below, there were no material changes from the risk factors disclosed in Item 1A. "Risk Factors" of our 2019 Form 10-K, filed with the SEC, which is accessible on the SEC's website at www.sec.gov.

The current outbreak and spread of the COVID-19 outbreak has disrupted, and is likely to further cause severe disruptions in, the U.S. and global economies and financial markets and create widespread business continuity and viability issues.

In recent years the outbreaks of a number of diseases, including Avian Bird Flu, H1N1, and various other "super bugs," have increased the risk of a pandemic. In December 2019, a novel strain of coronavirus (COVID-19) was reported to have surfaced in Wuhan, China. COVID-19 has since spread to over 100 countries, including the United States. COVID-19 has also spread to every state in the United States and in regions where we have our executive offices and principal operations, and in regions where our projects and other investments are located or where they are managed. On March 11, 2020, the World Health Organization declared COVID-19 a pandemic, and on March 13, 2020, the United States declared a national emergency with respect to COVID-19. Since March 13, 2020, there have been a number of federal, state and local government initiatives to manage the spread of the virus and its impact on the economy, financial markets and continuity of businesses of all sizes and industries.

The impact and duration of COVID-19 or another pandemic, is having and could in the future have significant repercussions across regional, national and global economies and financial markets, and could trigger a period of regional, national and global economic slowdown or regional, national or global recessions. The outbreak of COVID-19 in many

countries continues to adversely impact regional, national and global economic activity and has contributed to significant volatility and negative pressure in financial markets. The impact of the outbreak has been rapidly evolving and, as cases of the virus have continued to increase around the world, many countries, including the United States, have reacted by instituting, among other things, quarantines and restrictions on travel.

Since March, in an attempt to control COVID-19 the Federal government and most states and/or local governments, including where we have our office (Maryland) and in regions where our projects and other investments are located or where they are managed, have implemented various restrictions, rules, or guidelines including quarantines, restrictions on travel, "shelter in place", "stay at home", or "safer at home" rules, restrictions on types of business that may continue to operate, and/or restrictions on types of construction projects allowed. While some of these restrictions have been relaxed or phased out, many of these or similar restrictions remain in place, continue to be implemented, or additional restrictions are being considered. Although, in certain cases, exceptions may be available for certain essential operations and businesses which generally include the renewable energy projects in which we invest, there is no assurance that such exceptions will enable us to avoid adverse effects to our results of operations and business. Further, such actions create disruption in energy efficiency, renewable energy, real estate and other sustainable infrastructure markets and adversely impact a number of industries.

We believe that our ability to operate and our level of business activity has been, and will in all likelihood continue to be, impacted by effects of COVID-19 and could in the future be impacted by another pandemic and that such impacts could adversely affect the profitability of our business, as well as the values of, and the cash flows from, the assets we own. For example, the effects of COVID-19 or another pandemic could adversely impact our financial condition and results of operations due to, among other factors:

- interrupted service and availability of personnel, including our executive officers and other employees that are part of our management team and an inability to recruit, attract and retain skilled personnel-to the extent our management or personnel are impacted by the outbreak of pandemic or epidemic disease and are not available or allowed to conduct work, our business and operating results may be negatively impacted;
- difficulty accessing debt and equity capital on attractive terms, or at all, and severe disruption or instability in the global financial markets or deteriorations in credit and financing conditions may affect our ability or the ability of our sustainable infrastructure projects and our ultimate off-taker or project users to make regular payments of principal, interest or project revenue (e.g., due to unemployment, underemployment, or reduced income or revenues) or to access savings or capital necessary to fund business operations or replace or renew maturing liabilities on a timely basis, and may adversely affect the valuation of financial assets and liabilities, any of which could result in the inability to make payments under our borrowing facilities or notes, affect our or our projects' ability to meet liquidity, net worth, and leverage covenants under borrowing facilities or have a material adverse effect on the value of investments we hold or on our business, financial condition, results of operations and cash flows;
- temporary or lasting changes involving the status, practices and procedures of our or our projects or our projects' sponsors' operations, including with respect to new originations of investments - to the extent we elect or are required to limit or be more selective in making new originations of investments, we may strain our relationships with business partners, customers and counterparties, breach actual or perceived obligations to them, and be subject to litigation and claims from such partners, customers and counterparties, any of which could have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows; moreover, some of our ultimate off-taker or project users' operations, or our operations, the sustainable infrastructure markets or projects and our ultimate off-taker or project users have not been able to and others may not be able to function effectively because of, among other factors, disruptions in the normal operation of sustainable infrastructure markets or projects, any inability to access short-term or long-term financing, a disruption in the market for securitization transactions, or the inability to access these markets or execute securitization transactions due to negative impacts to our, our projects or our ultimate off-taker or project users financial condition or operating capabilities resulting from the COVID-19 pandemic; any or all of these impacts could result in reduced net investment income and cashflow, as well as an impairment of our investments which reductions and impairments could be material;
- to the extent ultimate off-taker or other project users that have been negatively impacted by the COVID-19 pandemic do not timely remit payments of principal, interest or other payments (whether due to an inability to make such payments, an unwillingness to make such payments, or a waiver of the requirement to make such payments on a timely basis or at all, including under the terms of any applicable forbearance, modification, or maturity extension agreement or program (which forbearance, waiver, or maturity extension may be available as a result of a government-sponsored or -imposed program or under any such agreement or program we or our project sponsors may otherwise offer)), then the value of our investments will likely be impaired, potentially materially; moreover, to the extent any such pandemic impacts local, regional or national economic conditions, the value of a sustainable infrastructure project is likely to decline, which would likely negatively impact the value of our investments, potentially materially;

- some of our sustainable infrastructure projects are being constructed and others are subject to ongoing maintenance; planned construction or maintenance of some of these projects have not been able to proceed on a timely basis or at all and others may be similarly affected as a result of being negatively impacted by the COVID-19 pandemic, including due to operating disruptions or government mandated moratoriums on construction, development or redevelopment or the inability to source the necessary construction personnel, equipment or parts; all of the foregoing factors would likely negatively impact the value of our investments, potentially materially;
- the inability of our project sponsors to operate in affected areas, including the bankruptcy of one or more project sponsors or their suppliers, or inability of our internal resources to effectively manage our investments in certain of their activities or perform certain administration functions;
- the inability of other third-party vendors we rely on to conduct our business to operate effectively and continue to support our business and operations, including vendors that provide IT services, legal and accounting services, or other operational support services;
- the inability of our or our investments' counterparties to make or satisfy the conditions, covenants or representations and warranties in agreements they have entered into with us or our counterparties; and
- our ability to ensure operational continuity in the event our business continuity plan is not effective or ineffectually implemented or deployed during a disruption.

The rapid development and fluidity of the circumstances resulting from this pandemic preclude any prediction as to the ultimate adverse impact of COVID-19. Nevertheless, COVID-19 and the current financial, economic and capital markets environment, and future developments in these and other areas present material uncertainty and risk with respect to our performance, financial condition, volume of business, results of operations and cash flows.

To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this "Risk Factors" section, as well as the Risk Factors in the Form 10-K, such as those relating to changes in interest rates, declining demand for our projects due to declining costs of traditionally-sourced energy, the lack of liquidity of our assets and investments, changes in the fair value of our assets, negative market conditions, our dependence on third-party contractual arrangements, our dependence on the availability of capital, changes in credit ratings assigned to our assets, counterparties to repurchase transactions' defaulting on their obligations and our investments' subjectivity to delinquency, foreclosure and loss.

Our results could be adversely affected by counterparty credit risk.

The economic impact of COVID-19 and the associated volatility in the financial markets has triggered a period of economic slowdown or recession and could jeopardize the solvency and financial wherewithal of counterparties with whom we do business. In the event a counterparty to us or one of our sustainable infrastructure projects becomes insolvent or unable to make payments, we may fail to recover the full value of our investment or realize the value from the counterparty's contract, thus reducing our earnings and liquidity. In addition, the insolvency of one or more of our, or one of our sustainable infrastructure projects', counterparties could reduce the amount of financing available to us, which would make it more difficult for us to leverage the value of our assets and obtain substitute financing on attractive terms or at all. A material reduction in our financing sources or an adverse change in the terms of our financings could have a material adverse effect on our financial condition and results of operations.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

During the nine months ended September 30, 2020, certain of our employees surrendered common stock owned by them to satisfy their federal and state tax obligations associated with the vesting of their restricted stock awards.

The table below summarizes our repurchases of common stock during 2020. These repurchases are related to the surrender of common stock by certain of our employees to satisfy their tax and other compensation related withholdings associated with the vesting of restricted stock. The price paid per share is based on the closing price of our common stock as of the date of the withholding.

Period	Total number of shares purchased	Average price per share	Total number of shares purchased as part of publicly announced plans or programs	Maximum number of shares that may yet be purchased under the plans or programs
February 1 - February 29, 2020	165,090	\$ 38.13	N/A	N/A
March 1 - March 31, 2020	267,653	36.14	N/A	N/A
May 1 - May 31, 2020	47,516	27.79	N/A	N/A

There were 57,400 OP units held by our non-controlling interest holders exchanged for shares of our common stock during the nine months ended September 30, 2020.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit number	Exhibit description
3.1	Articles of Amendment and Restatement of Hannon Armstrong Sustainable Infrastructure Capital, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Form 10-O for the quarter ended June 30, 2013 (No. 001-35877), filed on August 9, 2013)
3.2	Bylaws of Hannon Armstrong Sustainable Infrastructure Capital, Inc. (incorporated by reference to Exhibit 3.2 to the Registrant's Form 10-O for the quarter ended June 30, 2013 (No. 001-35877), filed on August 9, 2013)
3.3	Amended and Restated Agreement of Limited Partnership of Hannon Armstrong Sustainable Infrastructure, L.P. (incorporated by reference to Exhibit 3.3 to the Registrant's Form 10-O for the quarter ended June 30, 2013 (No. 001-35877), filed on August 9, 2013)
4.1	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)
4.2	Indenture, dated as of August 22, 2017, between Hannon Armstrong Sustainable Infrastructure Capital, Inc. and U.S. Bank National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K (No. 001-35877), filed on August 22, 2017)
4.3	First Supplemental Indenture, dated as of August 22, 2017, between Hannon Armstrong Sustainable Infrastructure Capital, Inc. and U.S. Bank National Association, as Trustee (including the form of 4.125% Convertible Senior Note due 2022) (incorporated by reference to Exhibit 4.2 to the Registrant's Form 8-K (No. 001-35877), filed on August 22, 2017)
4.4	Second Supplemental Indenture, dated as of August 21, 2020, between Hannon Armstrong Sustainable Infrastructure Capital, Inc. and U.S. Bank National Association, as Trustee (including the form of 0% Convertible Senior Note due 2023) (incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K (No. 001-35877), filed on August 21, 2020).
4.5	Indenture, dated as of July 2, 2019, between HAT Holdings I LLC and HAT Holdings II LLC, as issuers, and Hannon Armstrong Sustainable Infrastructure Capital, Inc., Hannon Armstrong Sustainable Infrastructure, L.P., and Hannon Armstrong Capital, LLC, as guarantors, and U.S. Bank National Association, as trustee (including the form of HAT Holdings I LLC and HAT Holdings II LLC's 5.25% Senior Notes due 2024), (incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K (No. 001-35877), filed on July 2, 2019)
4.6	Indenture, dated as of April 21, 2020, between HAT Holdings I LLC and HAT Holdings II LLC, as issuers, and Hannon Armstrong Sustainable Infrastructure Capital, Inc., Hannon Armstrong Sustainable Infrastructure, L.P., and Hannon Armstrong Capital, LLC, as guarantors, and U.S. Bank National Association, as trustee (including the form of HAT Holdings I LLC and HAT Holdings II LLC's 6.00% Senior Notes due 2025), (incorporated by reference to Exhibit 4.1 on the Registrant's Form 8-K (No. 001-35877), filed on April 21, 2020)
4.7	Indenture, dated as of August 25, 2020, between HAT Holdings I LLC and HAT Holdings II LLC, as issuers, and Hannon Armstrong Sustainable Infrastructure Capital, Inc., Hannon Armstrong Sustainable Infrastructure, L.P., and Hannon Armstrong Capital, LLC, as guarantors, and U.S. Bank National Association, as trustee (including the form of HAT Holdings I LLC and HAT Holdings II LLC's 3.750% Senior Notes due 2030) (incorporated by reference to Exhibit 4.1 on the Registrant's Form 8-K (No. 011-35877), filed on August 25, 2020).
10.1	Amended and Restated Employment Agreement, dated April 13, 2020, by and between Hannon Armstrong Sustainable Infrastructure Capital, Inc. and Jeffrey A. Lipson (incorporated by reference to Exhibit 10.1 to the Registrant's Form 10-O for the quarter ended March 31, 2020 (No. 001-35877), filed on May 11, 2020)
31.1*	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of Chief Executive Officer pursuant to section 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes—Oxley Act of 2002
32.2**	Certification of Chief Financial Officer pursuant to section 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes—Oxley Act of 2002
101.SCH*	Inline XBRL Taxonomy Extension Schema

101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File Included as Exhibit 101 (embedded within the Inline XBRL document)

* Filed herewith.

** Furnished herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

**HANNON ARMSTRONG SUSTAINABLE
INFRASTRUCTURE CAPITAL, INC.**
(Registrant)

Date: November 6, 2020

/s/ Jeffrey W. Eckel

Jeffrey W. Eckel

Chairman, Chief Executive Officer and President

Date: November 6, 2020

/s/ Charles W. Melko

Charles W. Melko

Chief Accounting Officer and Senior Vice President

EXHIBIT 31.2
CERTIFICATIONS

I, Jeffrey A. Lipson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Hannon Armstrong Sustainable Infrastructure Capital, Inc. (the “registrant”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal controls over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the Registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the Audit Committee of the registrant’s board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: November 6, 2020

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

EXHIBIT 32.1

CERTIFICATION PURSUANT TO SECTION 906

OF THE SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350

In connection with the Quarterly Report on Form 10-Q of Hannon Armstrong Sustainable Infrastructure Capital, Inc. (the "Company") for the period ended September 30, 2020, to be filed with the Securities and Exchange Commission on or about the date hereof (the "report"), I, Jeffrey W. Eckel, Chief Executive Officer and President of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

1. The report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the report fairly presents, in all material respects, the financial condition and results of operations of the Company.

It is not intended that this statement be deemed to be filed for purposes of the Securities Exchange Act of 1934.

Date: November 6, 2020

By: /s/ Jeffrey W. Eckel
Name: Jeffrey W. Eckel
Title: Chairman, Chief Executive Officer and President

EXHIBIT 32.2

CERTIFICATION PURSUANT TO SECTION 906

OF THE SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350

In connection with the Quarterly Report on Form 10-Q of Hannon Armstrong Sustainable Infrastructure Capital, Inc. (the "Company") for the period ended September 30, 2020, to be filed with the Securities and Exchange Commission on or about the date hereof (the "report"), I, Jeffrey A. Lipson, Chief Financial Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

1. The report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the report fairly presents, in all material respects, the financial condition and results of operations of the Company.

It is not intended that this statement be deemed to be filed for purposes of the Securities Exchange Act of 1934.

Date: November 6, 2020

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