

Hannon Armstrong

Going on offense: enhanced yields drive growth outlook -Raise PO to \$31, Buy

Reiterate Rating: BUY | PO: 31.00 USD | Price: 26.05 USD

FY24-26 guidance rolled-forward; stable outlook ahead

We reiterate our Buy rating on Hannon Armstrong (HASI) following mgmt.'s announcement of 8-10% annual EPS growth guidance for FY24-FY26 EPS. We update our FY24/FY25/FY26 distributable EPS estimates to \$2.45/\$2.69/\$2.86, which implies an 8.7% CAGR through FY26. Our estimates are +1% /+3% /-1% above/below current consensus. We look for portfolio originations to remain relatively flat from '23-'24 before returning to 5% growth in FY25 and 10% growth in FY26, with \$1.7-2bn per year held in the portfolio and 25% securitized. No growth in FY24 originations (vs FY23 28% growth) implies portfolio growth of 22% (vs FY23 44%) and 10% EPS growth (vs FY23 7%). Despite flat originations and decreasing portfolio growth, we see an increase in EPS growth due to rising portfolio yields, with indications of sustained investment yields approaching 10%+, giving us confidence in mgmt.'s targets. We model overall portfolio yield of ~8-9% over the period with spread remaining intact at 4-5%.

Still see net issuance ahead, but yields offset dilution

We expect some degree of equity/equity-like issuance in FY24 to fund incremental investments. In recent years, HASI has issued \$200-\$400mm annually in equity, and we model ~\$400mm in equity/equity-like issuance each year. We expect equity issuance to decline as a percentage of financing from 2025 onward, as mgmt. shifts away from equity financing. We look for the co-investments business to drive increased availability of internal cash flow. Critically, we see HASI maintaining its ~2x leverage ratio through our forecast period as mgmt. seeks to secure an IG rating at Fitch. Despite our expectation for continued equity issuance, we see leading-edge yields as more than offsetting dilution.

See further upside on attractive valuation - PO to \$31

We raise our PO to \$31 from \$27 following our latest MtM and model refresh. Valuation still screens attractive despite the stock's recent move higher. Our PO is based on a blend of DDM, DCF, and P/E methods weighted 33% each. We continue to apply a 2% discount to the peer group for the bottom-up discount rate in our DDM and DCF methodologies. For our P/E methodology, we continue to apply a 1.0x discount to a diverse peer group spanning business development companies, environmental services, and industrial products and services.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	2.08	2.23	2.45	2.69	2.86
GAAP EPS	0.46	1.36	1.88	2.10	2.25
EPS Change (YoY)	10.6%	7.2%	9.9%	9.8%	6.3%
Consensus EPS (Bloomberg)			2.43	2.62	2.88
DPS	1.50	1.58	1.66	1.74	1.83
Valuation (Dec)					
P/E	12.5x	11.7x	10.6x	9.7x	9.1x
GAAP P/E	56.6x	19.2x	13.9x	12.4x	11.6x
Dividend Yield	5.8%	6.1%	6.4%	6.7%	7.0%
EV / EBITDA*	459.0x	200.2x	72.4x	44.5x	30.1x
Free Cash Flow Yield*	0%	3.4%	12.3%	17.2%	23.0%
* For full definitions of <i>IQ</i> method ^{≤M} measures, see page 9.					

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Refer to important disclosures on page 10 to 12. Analyst Certification on page 7. Price
Objective Basis/Risk on page 7.

Timestamp: 12 March 2024 03:54PM EDT

12 March 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	27.00	31.00
2024E Rev (m)	420.6	454.2
2025E Rev (m)	496.0	588.6
2026E Rev (m)	NA	743.2
2024E EPS	2.53	2.45
2025E EPS	2.66	2.69
2026E EPS	NA	2.86
2024E DPS	1.69	1.66

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Stock Data

Price	26.05 USD
Price Objective	31.00 USD
Date Established	12-Mar-2024
Investment Opinion	C-1-7
52-Week Range	13.22 USD - 29.88 USD
Mrkt Val (mn) / Shares Out	2,929 USD / 112.4
(mn)	
Free Float	98.7%
Average Daily Value (mn)	24.21 USD
BofA Ticker / Exchange	HASI / NYS
Bloomberg / Reuters	HASI US / HASI.N
ROE (2024E)	12.9%
Net Dbt to Eqty (Dec-2023A)	195.4%
ESGMeter™	High

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

REIT: Real estate investment trust

iQprofile[™] Hannon Armstrong

iQmethod [™] – Bus Performance*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	0.3%	0.6%	1.3%	1.8%	2.3%
Return on Equity	11.5%	12.2%	12.9%	13.9%	14.9%
Operating Margin	11.2%	18.1%	30.9%	37.6%	43.1%
Free Cash Flow	0	100	360	503	674
iQmethod SM − Quality of Earnings*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	0x	0.4x	1.2x	1.3x	1.4x
Asset Replacement Ratio	0x	0x	0x	0x	0x
Tax Rate	15.0%	17.3%	15.0%	15.0%	15.0%
Net Debt-to-Equity Ratio	169.4%	195.4%	201.7%	200.5%	201.5%
Interest Cover	NA	NA	NA	NA	NA
Income Statement Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	161	229	370	495	640
% Change	21.2%	42.4%	61.6%	33.8%	29.3%
Gross Profit	111	137	199	280	379
% Change	22.4%	23.0%	45.0%	40.9%	35.3%
EBITDA	18	41	115	186	276
% Change	-1.3%	129.3%	176.6%	62.7%	48.0%
Net Interest & Other Income	31	141	155	171	188
Net Income (Adjusted) % Change	186 17.1%	232 25.0%	304 30.7%	394 29.9%	498 26.3%
Free Cash Flow Data (Dec) (US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	42	149	228	302	392
Depreciation & Amortization	0	0	0	0	0
Change in Working Capital	NA	NA	NA	NA	NA
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	(41)	(49)	132	201	282
Capital Expenditure	0	0	0	0	0
Free Cash Flow	0	100	360	503	674
% Change	-98.3%	NM	261.0%	39.6%	34.1%
Share / Issue Repurchase	189	492	411	452	444
Cost of Dividends Paid	(132)	(160)	(201)	(251)	(314)
Change in Debt	285	1,257	1,018	977	1,082
Balance Sheet Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	156	63	63	63	63
Trade Receivables	NA	NA	NA	NA	NA
Other Current Assets	0	0	0	0	0
Property, Plant & Equipment Other Non-Current Assets	NA 4,604	NA 6 400	NA 7.945	NA 0.424	NA
Total Assets	4,004 4,760	6,490 6,552	7,945 8,007	9,424 9,487	11,029 11,091
Short-Term Debt	4,700	0,552	0,007	0	0
Other Current Liabilities	0	0	0	0	0
Long-Term Debt	2,975	4,247	5,265	6,242	7,324
Other Non-Current Liabilities	120	163	163	163	163
Total Liabilities	3,095	4,411	5,428	6,405	7,487
Total Equity	1,665	2,142	2,579	3,081	3,604
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Total Equity & Liabilities	4,760	6,552	8,007	9,487	11,091

Company Sector

Alternative Energy

Company Description

Hannon Armstrong (HASI) is a specialty finance company based in MD that provides capital and advisory services to companies in the renewable energy (wind/solar), energy efficiency, and sustainable infra markets. The company's \$3bn portfolio of 200+ transactions includes 50% behind-the-meter assets such as energy efficiency, distributed solar, and storage, 45% of GC (grid-connected) assets such as wind and solar, and 5% of other sustainable infrastructure investments.

Investment Rationale

We expect a growing bias toward higher-yielding equity interests coupled with accelerating origination growth as supporting of higher earned returns. Pivot towards REIT is further enabling this higher-growth pivot, diluting impact of higher rates. Expanding partnerships and IRA benefits may foster pipeline growth and ensure sourcing of future deals. We see interest rate risk as a continued concern as higher cost of debt erodes interest margins on the fixed income portion of the portfolio.

Stock Data

Average Daily Volume

929,276

Quarterly Earnings Estimates

	2023	2024
Q1	0.53A	0.44E
Q2	0.53A	0.51E
Q3	0.62A	0.40E
04	0.53A	1.06E



Framing the outlook: higher yields are key

Although new FY24-26 guidance is lower than the previous 10-13% guidance through FY24, we ultimately view this more conservative forecast as positive given mgmt. expects growth to be fueled by stable origination volumes at higher incremental yields offsetting rates. Distributable EPS for FY2023 was \$2.23, missing \$2.29 BofAe and the \$2.26 consensus estimate by 3% and 1%, respectively. Weighted average portfolio yield remained flat at 7.9% QoQ, but it is important to note that originations in 2023 saw yields at 9%+, driven by higher costs of capital with the new 2023 cost of debt at 7%. We view mgmt's strategic focus on building out the co-investment business as a solid avenue to be less reliant on capital markets to fund balance sheet originations. We assume that ~75% of originations will be held on the balance sheet moving forward and that the % of equity used to fund the balance sheet will decrease over time. We believe this will result in reduced share price volatility in the long term.

Exhibit 1: HASI earnings dashboard

Forecast assumes flat originations thru '24 and increasing portfolio yield from FY23 levels

\$000s	2021	2022	2023	2024E	2025E	2026E	2027E	2028E
Core earnings	158,723	185,791	232,248	303,655	394,374	497,921	595,165	708,116
Consensus Core earnings - VA	158,672	185,802	232,247	278,679	330,905			
EPS - Diluted	\$1.88	\$2.08	\$2.23	\$2.45	\$2.69	\$2.86	\$2.92	\$3.07
y/y % chg		10.6%	7.1%	10.2%	9.6%	6.4%	2.1%	5.2%
BofAe EPS CAGR from 2021		10.6%	8.8%	9.3%	9.4%	8.8%	7.6%	8.5%
Prior EPS			\$2.32	\$2.53	\$2.66	\$2.80	\$2.86	\$2.99
% chg vs. prior				(3.0%)	1.1%	2.2%	2.2%	2.8%
EPS Guidance - 8-10% 2024-2026								
Low			\$2.06	\$2.41	\$2.60	\$2.81	\$3.03	\$3.28
Midpoint			\$2.15	\$2.43	\$2.65	\$2.89	\$3.15	\$3.43
High			\$2.24	\$2.45	\$2.70	\$2.97	\$3.26	\$3.59
Consensus EPS (Diluted) - VA			\$2.23	\$2.42	\$2.66	\$2.88		
Consensus EPS (Diluted) - Bloomberg			\$2.26	\$2.43	\$2.62	\$2.88		
Consensus EPS CAGR from 2021 - Bloomberg			9.5%	8.9%	8.6%	8.9%		
BofA vs. Consensus - Bloomberg				\$0.02	\$0.08	(\$0.02)		
Dividend per Share	\$1.40	\$1.50	\$1.58	\$1.66	\$1.74	\$1.83	\$1.92	\$2.02
DPS Growth	2.2%	7.1%	5.3%	5.1%	5.0%	5.0%	5.0%	5.0%
Consensus - DPS (VA)	\$1.40	\$1.50	\$1.58	\$1.66	\$1.74	\$1.83		
DPS Growth	2.2%	6.8%	5.6%	5.2%	4.7%	4.7%		
Leverage								
Leverage Ratio - hold-co (not incl. project level)			2.0x	2.0x	2.0x	2.0x	2.0x	2.0x

Source: Company Filings, Bloomberg, BofA Global Research estimates

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RNG becoming a bigger piece of the pie

2023 was a big year of portfolio growth and acceleration. Notably, HASI saw portfolio growth of 44% YoY driven by an increase in the higher-yielding Fuels, Transport & Nature (FTN) portfolio segment, increasing 368% in value to ~\$800mm YoY, supporting the uplift in overall portfolio yield. Within the FTN segment are RNG (renewable natural gas) and fleet transport projects. The RNG segment is the larger piece, with landfill gas projects presenting attractive opportunities for HASI, which recently completed a project with Ameresco (AMRC). HASI has had success with their FTN projects due to their contracted cash flows, proven technologies, and quality off-takers. FTN credit yields and equity returns are reasonably robust relative to other growing subsectors in the portfolio and should support long-term portfolio value. Despite the headwinds to profitability that public solar companies have been facing, HASI has had minimal delinquencies in their resi solar portfolio given their customers' strong credit profiles. Interestingly, 4Q23 saw a 41% increase in Community Solar portfolio value and a 2% increase in Residential Solar portfolio value. We view community solar as an attractive opportunity in the space given the subscription-based model, low credit risk, enablement through state legislation, and ultimate transformation into a flow business. We look to see rising



portfolio yields, specifically in the FTN segment, drive earnings growth through the 2024-2026 period.

Shares screen attractive - see below for valuation updates

We raise our PO to \$31 following our latest mark-to-market and model refresh. Our PO is based on a blend of DDM, DCF, and P/E methodologies weighted 33% each. We continue to apply a 2% discount to the peer group for our bottom-up discount rate in our DDM and DCF methodologies. For our P/E methodology, we continue to apply a 1.0x discount to a diverse peer group spanning business development companies, environmental services, and industrial products and services. We no longer include REITs in our peer analysis following HASI's discontinuation of REIT status earlier this year. Our DDM valuation is extended through 2030, our DCF now begins in 2024, and our P/E valuation is now based on 2025E.

Exhibit 2: HASI valuation summary

Raise PO to \$31

HASI Valuation

	Value/Unit	Weight	Weighted Value
Dividend Discount Model	\$21.00	33%	\$7.00
DCF Methodology	\$27.00	33%	\$9.00
P/E Methodology	\$45.00	33%	\$15.00
HASI Value/Sh			\$31.00
Share Price (As of 03/11/24)			\$26.05
Premium (Discount) to Share Price			19%
2024E Dividend Yield			6.4%
Total Potential Return			25.4%

Source: Company Filings, Bloomberg, BofA Global Research estimates

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Below we show our dividend discount model (DDM) for HASI, which has increased +\$1 since our last update. We expect dividends to grow at 5% YoY through 2026, a slightly lower rate than EPS growth, to achieve a decreasing payout ratio in the 60-70% guided range. We roll forward our DDM to 2030 consistent with treatment of other peers, seeing dividend growth in the ~5% range at the end of the period. Considering our DDM implies the lowest per-share value for HASI, we view a decreasing emphasis on the dividend as a potential source of upside for valuation. Our new 11.15% cost of equity reflects our MtM of the Treasury rate and adjusted beta.

Exhibit 3: HASI dividend discount analysis

We arrive at a \$21 dividend discount valuation

	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
DPS Growth		5.3%	5.1%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
DPS	\$1.50	\$1.58	\$1.66	\$1.74	\$1.83	\$1.92	\$2.02	\$2.12	\$2.22
DPS Guidance (5-8% CAGR)		\$1.57-1.71	\$1.66						
Terminal Value									\$20.04
Discounted Cash Flows									
Discount Factor			1.00	0.90	0.81	0.73	0.66	0.59	0.53
Discounted Cash Flows			\$1.66	\$1.57	\$1.48	\$1.40	\$1.32	\$1.25	\$11.84
Value/Unit		\$21.00							
Premium (Discount) to Share Price (As of 03/11/24)	_	-19%							
Memo:									
Terminal Value (2030 Required Yield)		13.1%							
Terminal Value Growth Rate		2.0%							
Discount Rate		11.1%							
Share Price (As of 03/11/24)		\$26.05							

Source: Company Filings, Bloomberg, BofA Global Research estimates

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Our DCF for HASI is shown below. We roll forward our DCF to begin in 2024. Our new 11.15% cost of equity reflects our MtM of the Treasury rate and adjusted beta. We value the existing portfolio consistent with our approach for similar companies in our coverage



universe (Part I of Exhibit 4). Our DCF valuation contemplates the portfolio as it stands today and represents the discounted value of future cash flows after debt service. Given HASI is no longer a REIT, we remove commercial mortgage REITs from our peer group in valuing the securitization business (Part II of Exhibit 4). We also roll forward to 2026 for Part II. Our peer multiple for Part II moves to 9.2x from 8.5x and is now solely based on a peer group of business development companies (BDCs).

Exhibit 4: HASI DCF Analysis

We arrive at a \$28/sh DCF valuation

HASI DCF Analysis

Part I of DCF: Static DCF of Portfolio as of 2023	·
Yield Disclosed by Mgmt on Portfolio	7.9%
Cost of debt	6.0%
Portfolio Amortization	17
Equity Amortization	100
Cumulative Gross CF	8,318
Cost of equity	11.1%
NPV (\$mn)	\$1,275
Shares outstanding (mn)	113.8
NPV per share on core portfolio	\$11.00

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Part II of DCF; Valuing the Securitization Biz + Corporate Overhang	¢5.000
Latest Disclosed Pipeline (\$Bn) - Latest Slides	\$5,000
Pipeline Realization	50%
Percent Securitization (linked to I/S)	24%
Securitization Amount (\$Bn)	\$608
Implied Yield (Below Against Assumption)	9.5%
Linked to I/S	
SG&A (annual est.)	(64.3)
Origination on Portion Sold Down (Gain on Sales Est for '24)	57.5
Assume ALL of the Business is Securitized (e.g.: this is growth)	236.6
Annual net gain on sale (\$mn), net of SG&A	172.3
P/E multiple - BDC peer group - '26	9.2x
Prem to peer group	2.0x
P/E multiple - HASI Securitization Biz	11.2x
Net equity value (\$mn)	\$1,929.3
Shares outstanding (mn)	113.8
Value of origination business per share	\$17.00
Total implied equity value	\$28.00
Current HASI share price	\$25.94
2024E Dividend Yield	6.4%
Potential Return	14.3%
10-yr Treasury	4.15%
FRP	5.0%
Adj. Beta (YieldCo Peer Avg)	1.00
Discount Rate	9.1%
(Prem)/disc to peer group	2.0%
Cost of Equity	11.1%

Source: Company filings, Bloomberg, BofA Global Research estimates

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Our P/E methodology is shown below and is \$10 above our last update due to our roll forward to 2026 and the MtM of our peer group multiple increasing the multiple from 14.1x to 16.8x. We kept our relative discount to the peer group at (1.0)x given stable earnings trajectory. We no longer include REITs in our peer analysis following HASI's discontinuation of REIT status earlier this year.

Exhibit 5: HASI P/E analysis

We arrive at a \$45 P/E valuation

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2026 P/E Multiple - Peer Group	16.8x
Plus: Prem/(Disc) to Peer Group	(1.0x)
P/E Multiple - HASI	15.8x
HASI 2026E EPS	\$2.86
HASI Valuation (\$/sh)	\$45.00
Prem/(Disc) to Share Price	72.7%

Source: Company Filings, Bloomberg, BofA Global Research estimates

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Price objective basis & risk

Hannon Armstrong (HASI)

Our valuation with \$31/share price objective uses 33%/33%/33% DDM/DCF/PE methodology, with \$20 DDM valuation, \$28 DCF valuation, \$45 relative P/E valuation.

For the DCF & P/E method, we apply a cost of equity of 11.15% with 4.15% 10-year Treasury, 1.0 adj. beta, a 200bps discount to the peer overall group, and a 2x premium to peer group of business development companies (BDCs) to value existing portfolio and growth prospects.

For the DDM, we assume 5% annual DPS growth for 2024-2030, and 2% terminal growth.

For the PE valuation, we apply a 1x discount to the '26E peer P/E multiple of 16.8x. Our peer group includes business development companies, environmental service companies, & industrials.

Downside risks: 1) Origination growth below expectations, 2) slowdown in securitization transactions, 3) shift toward greater proportion of BTM vs. GC assets resulting in drag on portfolio's yield, 4) rapid rise in interest rates, 5) slowing dividend growth.

Analyst Certification

I, Julien Dumoulin-Smith, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Alliant Energy Corporation	LNT	LNT US	Julien Dumoulin-Smith
	Array Technologies	ARRY	ARRY US	Julien Dumoulin-Smith
	Atlantica Sustainable Infrastructure	AY	AY US	Julien Dumoulin-Smith
	Atmos Energy Corporation	ATO	ATO US	Julien Dumoulin-Smith
	CenterPoint Energy	CNP	CNP US	Julien Dumoulin-Smith
	Cheniere Energy Inc	LNG	LNG US	Julien Dumoulin-Smith
	Clearway Energy	CWENA	CWEN/A US	Julien Dumoulin-Smith
	Clearway Energy	CWEN	CWEN US	Julien Dumoulin-Smith
	CMS Energy	CMS	CMS US	Julien Dumoulin-Smith
	Consolidated Edison	ED	ED US	Julien Dumoulin-Smith
	DTE Energy	DTE	DTE US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	ENLT	ENLT US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	XENLF	ENLT IT	Julien Dumoulin-Smith
	Entergy	ETR	ETR US	Paul Zimbardo
	First Solar, Inc.	FSLR	FSLR US	Julien Dumoulin-Smith
	Fluence Energy	FLNC	FLNC US	Julien Dumoulin-Smith
	Hannon Armstrong	HASI	HASI US	Julien Dumoulin-Smith
	MDU Resources Group, Inc.	MDU	MDU US	Julien Dumoulin-Smith
	Nextracker Inc	NXT	NXT US	Julien Dumoulin-Smith
	NiSource Inc	NI	NI US	Julien Dumoulin-Smith
	NorthWestern Energy Group	NWE	NWE US	Julien Dumoulin-Smith
	NRG Energy	NRG	NRG US	Julien Dumoulin-Smith
	PG&E Corporation	PCG	PCG US	Julien Dumoulin-Smith
	PNM Resources Inc.	PNM	PNM US	Julien Dumoulin-Smith
	PPL Corporation	PPL	PPL US	Paul Zimbardo
	Public Service Enterprise Group	PEG	PEG US	Julien Dumoulin-Smith
	Sempra	SRE	SRE US	Julien Dumoulin-Smith
	Sunnova Energy	NOVA	NOVA US	Julien Dumoulin-Smith
	SunRun	RUN	RUN US	Julien Dumoulin-Smith



North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	TPI Composites	TPIC	TPIC US	Julien Dumoulin-Smith
	Vistra Corp	VST	VST US	Julien Dumoulin-Smith
	Xcel Energy Inc	XEL	XEL US	Julien Dumoulin-Smith
NEUTRAL	7.66. 2.16.6) III	, LE	ALE 00	Janen Banneam Simen
NEUIKAL	AES	AES	AES US	Julian Dumaulin Smith
				Julien Dumoulin-Smith
	Algonquin Power & Utilities Corp	AQN	AQN US	Paul Zimbardo
	Algonquin Power & Utilities Corp	YAQN	AQN CN	Paul Zimbardo
	AltaGas	YALA	ALA CN	Cameron Lochridge
	Ameren Corporation	AEE	AEE US	Julien Dumoulin-Smith
	Ameresco	AMRC	AMRC US	Julien Dumoulin-Smith
	American Electric Power	AEP	AEP US	Julien Dumoulin-Smith
	ChargePoint Holdings	CHPT	CHPT US	Cameron Lochridge
	Constellation Energy Corp	CEG	CEG US	Paul Zimbardo
	Duke Energy	DUK	DUK US	Julien Dumoulin-Smith
	Emera Inc	YEMA	EMA CN	Julien Dumoulin-Smith
	Essential Utilities	WTRG	WTRG US	Julien Dumoulin-Smith
	Evergy, Inc	EVRG	EVRG US	Julien Dumoulin-Smith
	Exelon	EXC	EXC US	Paul Zimbardo
		GNRC	GNRC US	Julien Dumoulin-Smith
	Generac Holdings Inc.			•
	Hydro One	YH	H CN	Julien Dumoulin-Smith
	Idacorp	IDA	IDA US	Paul Zimbardo
	Maxeon Solar Technologies	MAXN	MAXN US	Julien Dumoulin-Smith
	NextEra Energy	NEE	NEE US	Julien Dumoulin-Smith
	NextEra Energy Partners	NEP	NEP US	Julien Dumoulin-Smith
	OGE Energy Corp	OGE	OGE US	Julien Dumoulin-Smith
	Ormat Technologies	ORA	ORA US	Julien Dumoulin-Smith
	Pinnacle West	PNW	PNW US	Julien Dumoulin-Smith
	Portland General Electric Company	POR	POR US	Julien Dumoulin-Smith
	Southern Company	SO	SO US	Julien Dumoulin-Smith
	Southwest Gas Holdings	SWX	SWX US	Julien Dumoulin-Smith
	TransAlta Corp	TAC	TAC US	Julien Dumoulin-Smith
	·			,
	TransAlta Corporation	YTA	TA CN	Julien Dumoulin-Smith
UNDERPERFORM	All and		415116	11. 5. 11. 6. 11
	Allete Inc	ALE	ALE US	Julien Dumoulin-Smith
	American Water Works	AWK	AWK US	Julien Dumoulin-Smith
	Avista	AVA	AVA US	Julien Dumoulin-Smith
	Black Hills Corporation	BKH	BKH US	Julien Dumoulin-Smith
	Bloom Energy	BE	BE US	Julien Dumoulin-Smith
	Dominion Energy	D	D US	Paul Zimbardo
	Edison International	EIX	EIX US	Paul Zimbardo
	Enphase Energy	ENPH	ENPH US	Julien Dumoulin-Smith
	Eversource Energy	ES	ES US	Paul Zimbardo
	FirstEnergy	FE	FE US	Julien Dumoulin-Smith
	Fortis	YFTS	FTS CN	Julien Dumoulin-Smith
		FTS		•
	Fortis Inc		FTS US	Julien Dumoulin-Smith
	FREYR Battery	FREY	FREY US	Julien Dumoulin-Smith
	FTC Solar	FTCI	FTCLUS	Julien Dumoulin-Smith
	Hawaiian Electric Industries	HE	HE US	Julien Dumoulin-Smith
	MGE Energy	MGEE	MGEE US	Julien Dumoulin-Smith
	New Jersey Resources Corp	NJR	NJR US	Julien Dumoulin-Smith
	ONE Gas, Inc.	OGS	OGS US	Julien Dumoulin-Smith
	SolarEdge Technologies	SEDG	SEDG US	Julien Dumoulin-Smith
	Spire	SR	SR US	Julien Dumoulin-Smith
	Stem, Inc.	STEM	STEM US	Julien Dumoulin-Smith
	SunPower Corp.	SPWR	SPWR US	Julien Dumoulin-Smith
				•
	UGI Corp.	UGI WEC	UGI US	Julien Dumoulin-Smith
	WEC Energy Group Inc	WEL	WEC US	Julien Dumoulin-Smith
RVW				
	New Fortress Energy	NFE	NFE US	Cameron Lochridge



*IQ*method[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 - Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt — Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities	Sales

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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Hannon Armstrong (HASI) Price Chart



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Equity Investment Rating Distribution: Alternative Energy Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	8	47.06%	Buy	8	100.00%
Hold	5	29.41%	Hold	3	60.00%
Sell	4	23.53%	Sell	1	25.00%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%
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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

Buy	≥ 10%	≤ /0%
Neutral	≥ 0%	≤ 30%
Jnderperform	N/A	≥ 20%

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