

Atlantica Sustainable Infrastructure

Worth another look, despite the lost favor of YieldCos; Buy

Reiterate Rating: BUY | PO: 22.00 USD | Price: 18.44 USD

Several Moving Pieces but Reiterate Constructive Views

We reiterate Buy on YieldCo Atlantica (AY) despite lowering our PO from \$31 to \$22 to reflect the impact of higher interest rates. As mgmt. explores strategic opportunities, shares look interesting following the sharp decline. Latest pullback is a result of (1) increasing DCF discount rate to 10.38% from 8.78%; (2) accentuated fears of hampered prospective renewable growth as higher rates challenge project returns - we think these concerns are far overstated; (3) overhang from AQN's 42% ownership of AY shares: AQN still evaluating many possibilities for its renewable business. Investors have been fearful of a public block sale of AY but precedent would be for a negotiated private transaction.

Buyback in lieu of Strategic review? Another angle...

A further angle to consider is whether AY would elect to delay contemplated growth investments to pursue share buybacks. The caveat being that a buyback would seemingly require formal conclusion of the strategic review process, a negative for shares. Recall, previous processes failed to result in a conclusion. A buyback would likely be limited without a change in dividend policy with only \sim \$73 mn cash as of 6/30. Expect any buyback to be limited to \sim 5% or best case 10% of shares. Mixed reactions potentially.

Perhaps some latitude in the development pipeline

To deliver a buyback, we presume AY would need to delay internal construction efforts under way (such as ATS transmission expansion, particularly likely as an existing asset). However, this would push out organic development and the associated \$165-185 mn investments earmarked for 2023. Coupled with a challenged M&A market, we emphasize existing obstacles to growth ambitions may be at odds with NT share recovery.

Strategic uncertainty remains but getting paid to wait

We pivot to a DCF (25%) and DDM (75% vs 75% Growth valuation prior) reflecting reduced growth for YieldCos. Our DDM reflects just 3% dividend growth and aligns with the last three-year trend for AY. After the latest decline in shares, we see shares as trading at a ~20% discount plus offering a 10% current dividend yield. Although the foreign assets and lower transparency versus US peers has caused less investor interest, we see value, regardless of the strategic review outcome. Risks remain from an uncertain strategic review process and continued interest rate pressures but current +10% div. yield offsets. Buy.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	(0.26)	(0.05)	(0.35)	0.15	0.37
EPS Change (YoY)	NM	80.8%	-600.0%	NM	146.7%
Consensus EPS (Bloomberg)			0.45	0.68	0.78
DPS	1.72	1.78	1.80	1.91	2.02
Valuation (Dec)					
P/E	NM	NM	NM	122.9x	49.8x
GAAP P/E	NM	NM	NM	122.9x	49.8x
Dividend Yield	9.3%	9.6%	9.8%	10.4%	10.9%
EV/EBITDA*	11.0x	13.8x	10.8x	9.7x	9.1x
Free Cash Flow Yield*	23.6%	27.4%	18.1%	22.4%	24.5%
* For full definitions of <i>IQ</i> method ^{5M} measures, see page 11.					

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Refer to important disclosures on page 13 to 17. Analyst Certification on page 10. Price Objective Basis/Risk on page 8.

11 October 2023

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	31.00	22.00
2023E Rev (m)	1,300.2	1,203.6
2024E Rev (m)	1,391.5	1,372.3
2025E Rev (m)	1,473.3	1,464.3
2023E EPS	1.45	-0.35
2024E EPS	1.79	0.15
2025E EPS	2.02	0.37
2023E DPS	1.85	1.80

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Stock Data

Price	18.44 USD
Price Objective	22.00 USD
Date Established	9-Oct-2023
Investment Opinion	B-1-7
52-Week Range	16.47 USD - 29.81 USD
Mrkt Val (mn) / Shares Out	2,142 USD / 116.2
(mn)	
Average Daily Value (mn)	14.43 USD
BofA Ticker / Exchange	AY / NAS
Bloomberg / Reuters	AY US / AY.OQ
ROE (2023E)	-2.8%
Net Dbt to Eqty (Dec-2022A)	277.8%
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".

See page 8 for abbreviations

iQprofile[™] Atlantica Sustainable Infrastructure

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iQmethod [™] – Bus Performance*					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	1.8%	1.5%	2.2%	2.6%	3.1%
Return on Equity	-2.0%	-0.3%	-2.8%	1.4%	3.7%
Operating Margin	29.2%	25.2%	34.4%	34.9%	35.8%
Free Cash Flow	506	586	387	479	526
<i>i</i> Q method [™] – Quality of Earnings*					
	20214	20224	20225	20245	2025
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Cash Realization Ratio	NM Ox	NM Ox	NM Ox	25.2x 0x	10.9x 0x
Asset Replacement Ratio Tax Rate	143.2%	82.3%	134.2%	56.5%	44.5%
	310.9%	277.8%	314.4%	340.0%	365.0%
Net Debt-to-Equity Ratio Interest Cover	310.9% 1.0x	0.8x	1.1x	1.3x	1.3
Income Statement Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Sales	1,212	1,102	1,134	1,314	1,406
% Change	19.6%	-9.1%	2.9%	15.9%	7.0%
Gross Profit	1,286	1.183	1,204	1,372	1.464
% Change	15.6%	-8.1%	1.8%	14.0%	6.7%
EBITDA	793	629	805	902	960
% Change	1.5%	-20.7%	27.9%	12.1%	6.3%
Net Interest & Other Income	(329)	(289)	(347)	(350)	(357)
Net Income (Adjusted)	(30)	(5)	(42)	19	48
% Change	NM	81.9%	-668.3%	NM	153.8%
Free Cash Flow Data (Dec)	2021A	20224	20225	20245	2025E
(US\$ Millions)		2022A	2023E	2024E	
Net Income from Cont Operations (GAAP)	(11)	(2)	(15)	47	81
Depreciation & Amortization	439	351 79	414 0	444 0	457
Change in Working Capital Deferred Taxation Charge	(3) NA	NA	NA		0
	1NA 80	158		NA (12)	NA (12)
Other Adjustments, Net	0	0	(12) 0	(12) 0	(12) C
Capital Expenditure Free Cash Flow	506	586	387	47 9	526
% Change	15.4%	16.0%	-33.9%	23.7%	9.7%
Balance Sheet Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	623	601	872	740	603
Trade Receivables	307	200	200	200	200
Other Current Assets	237	230	230	230	230
Property, Plant & Equipment	8,022	7,483	7,069	7,358	7,568
Other Non-Current Assets	563	586	586	586	586
Total Assets	9,752	9,101	8,957	9,115	9,187
Short-Term Debt	676	343	296	326	334
Other Current Liabilities	148	176	176	176	176
Long-Term Debt	5,383	5,227	5,398	5,558	5,668
Other Non-Current Liabilities	1,796	1,566	1,554	1,542	1,530
Total Liabilities	8,003	7,312	7,423	7,602	7,708
Total Equity	1,749	1,789	1,534	1,513	1,480
Total Equity & Liabilities	9,752	9,101	8,957	9,115	9,187
* For full definitions of 10 method 5 measures, see page 11	-,,	2,101	-,,	-,	3,.37

Company Sector

Electric Utilities

Company Description

Atlantica Yield (AY) owns and operates 1.35 GW of renewable and 300 MW of conventional generation, electric transmission lines, as well as water assets in North America (US and Mexico), South America Peru, Chile, and Uruguay), and EMEA (Spain, Algeria, and South Africa).

Investment Rationale

We see AY with its long-term fixed-price PPA structure as favorably positioned to mitigate rising rate risk vs. renewable/cleantech peers. Furthermore, AY has the ability to diversify into international markets as well as other asset types (transmission, etc.) for growth. With greater clarity around AY's upcoming growth investments and asset development pipeline, we move to Buy, as AY offers increasingly visible growth at a palatable valuation.

Stock Data

Average Daily Volume 782,359

Quarterly Earnings Estimates

	2022	2023
21	-0.11A	-0.09E
Q2	0.14A	0.31E
Q3	-0.11A	0.21E
04	0.03A	-0.78E

^{*} For full definitions of $\emph{IQ} method^{\, \rm SM}$ measures, see page 11.

Shares trading at a discount to a range of metrics

AY shares are trading now <9x EV/EBITDA, which is below levels we saw at Duke Energy's (DUK) earlier renewable asset sale; although this DUK portfolio suffered from meaningful risks, we stress we have not seen renewable asset sales transacted at these depressed multiples since pre-COVID. In the last quarter, AY began trading below its historical average valuation, where the most recent leg down has been catalyzed by NextEra Energy Partners' (NEP) reduced growth estimates. The bearish argument is that AY's mix of international assets deserves a discount; however, AY has one of the longer contracted lives. Historically strategic processes have resulted in meaningful premiums to our DCF assumptions.

Exhibit 1: AY 2 yr forward EV/EBITDA

Historical average 2-yr forward EV/EBITDA multiple is between 9 and 10x, and AY shares have trended below this average in recent months.



Source: Bofa Global Research, Factset

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In AY's case, however, many investors seem hesitant to get involved in AY shares, given the already extended strategic review process. Recall, AY announced the board's decision to commence a strategic review at the end of February 2023. Almost 8 months later, we still lack any clarity about preferred outcomes or a targeted timeline. Especially after AY's prior strategic review process concluded with minimal conclusions (ended in March 2020 upon the onset of COVID), many investors remain sidelined.

The risk of AY reaching no conclusion from this strategic review lingers, as well, and continues to weigh on sentiment. Coupled with management's insistence that it will not offer any updates on the strategic review process until it is finalized, it seems many investors have grown impatient and unwilling to offer any additional credit to AY shares. Even still, we highlight AY trading at a sizable 24% discount to our revised DCF, which is well below the YieldCo peer group average of a 16% premium and closest peers retaining mid-single digit premiums to DCF value.

Exhibit 2: YieldCo DCF valuation vs current price

AY is currently trading at a robust 24% discount to our BofA estimated DCF value, which is unlike peers, who presently trade at a modest 2% premium to DCF value on average.

		DCF/Share	
Ticker	Price	(not a PO)	Premium/(Discount)
CWEN	\$20.92	\$20	5%
NEP	\$20.58	\$19	8%
ORA	\$66.59	\$49	36%
Average Premium / (Discount) to DCF			16%
AY	\$17.42	\$23	-24%



Exhibit 2: YieldCo DCF valuation vs current price

AY is currently trading at a robust 24% discount to our BofA estimated DCF value, which is unlike peers, who presently trade at a modest 2% premium to DCF value on average.

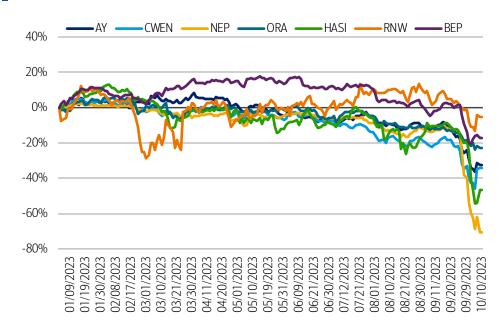
		DCF/Share	
Ticker	Price	(not a PO)	Premium/(Discount)

Source: Bofa Global Research, Factset

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Exhibit 3: YTD price performance of YieldCos

YieldCo shares have struggled in recent weeks, accelerated by the cut to NEP's growth targets



Source: Bofa Global Research, Factset

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Exhibit 4: Historical Div Yield and Div Yield growth (3-yr trailing avg)

Muted annual dividend growth of late has contributed to AY's strategic action; expecting pickup in dividend yield in the coming years against currently weak share price

AY	2014A	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E
DPS	\$0.56	\$1.43	\$0.70	\$1.11	\$1.39	\$1.61	\$1.67	\$1.74	\$1.78	\$1.79	\$1.83	\$1.91
DPS Growth		157%	-51%	59%	25%	16%	4%	4%	2%	1%	2%	4%
Div Yield	1.1%	7.4%	2.3%	5.0%	6.8%	5.9%	4.4%	4.8%	6.8%	10.3%	10.5%	10.9%
Div Yield Growth		583%	-68%	111%	37%	-12%	-27%	10%	42%	51%	2%	4%
Historical div yield growth - 3 yr trailing avg				209%	27%	45%	-1%	-10%	9%	34%	32%	19%
Stock Price	\$17.42											

Source: Bofa Global Research, Factset

*Estimated dividend yield are based on current price

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Valuation

We lower our PO to \$22/sh from \$31/sh. This shift in our PO is related to estimate changes, a mark to market (MtM), and a methodology refresh to align with our updated framework for yieldco peers. We credit \$846 mn of EBITDA in FY23 vs. \$790-850 mn guidance and \$823 mn consensus, and we model \$244 mn of CAFD vs. \$235-260 mn guidance. We clean up our modeling of other operating income and depreciation and amortization, as well as updated interest rate assumptions.

We observe increased investor interest in the YieldCos after NextEra lowered its growth assumptions for its drop down vehicle, NextEra Energy Partners (NEP). Although AY shares currently trade at an attractive valuation, we recognize that the YieldCo sector faces elevated growth and financing concerns. AY remains competitively positioned with limited financing needs with a fairly healthy balance sheet (\$73 mn of cash on balance sheet and \$393 mn in its revolving credit facility at the corporate level; \$197 mn of restricted cash and \$217 mn of non-restricted cash at the project level as of 6/30/23).

Regarding its interest rate exposure, 92% of AY's project debt and ~96% of its corporate debt has either fixed interest rates or hedge programs in place. Most often, AY's hedging programs are structured with swaps or caps for the term of the project. It is our understanding that AY has relatively minimal floating rate debt exposure after hedges, which poses another advantage in this environment.

Exhibit 5: AY Key Estimates

We outline our estimates of key metrics for AY in the coming years. Most recently, AY has struggled to deliver robust distribution growth, given minimal M&A transactions and delayed contribution from organic growth efforts. We expect muted distribution growth in the coming years, given current macro and sector pressures.

	2021A	2022A	1Q23	2Q23	3Q23	4Q23	2023E	2024E	2025E
EBITDA Reconciliation									
Net Income (Loss) attributable to the Company	(30.1)	(5.4)	(11.0)	35.7	24.1	(90.7)	(41.9)	19.0	48.2
Loss/(profit) attributable to non-controlling interests	19.2	3.4	5.0	1.1	6.8	14.1	27.0	28.1	32.5
Income Tax Benefit (Expense)	36.2	(9.7)	(9.7)	7.5	14.5	45.7	58.1	61.2	64.7
Share of (profits)/losses of associates	(12.3)	(21.5)	(6.2)	(4.7)	(1.0)	8.0	(3.8)	(3.9)	(4.0)
Interest Expense and Related Charges	340.9	310.9	80.4	79.0	87.7	103.9	351.0	353.7	361.3
Operating Profit	353.9	277.7	58.6	118.5	132.2	81.0	390.4	458.1	502.7
Other adjustments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation and Amortization	439.4	473.6	103.8	103.3	103.6	103.6	414.2	444.2	456.9
Further Adjusted EBITDA	793.3	751.3	162.4	221.9	235.8	184.6	804.6	902.3	959.5
EBITDA from Unconsolidated Affiliates	31.1	45.8	11.8	7.8	11.0	11.0	41.6	0.0	0.0
Further Adjusted EBITDA incl. unconsolidated affiliates	824.4	797.1	174.2	229.6	246.8	195.6	846.2	902.3	959.5
% chg y/y	3.6%	-3.3%					6.2%	6.6%	6.3%
Guidance	\$820-860	810-870					790-850		
EBITDA Consensus	814.6	797.1	175	232	235	179	822.7		
BofAe EBITDA vs. Consensus (%)	1.2%	0.0%					2.9%		
BofAe EBITDA vs. Guidance (%)	(1.9%)								
Cash Available for Distribution (CAFD)	225.5	256.5	61.0	63.5	95.5	23.5	243.6	258.5	287.2
Guidance	220-240	230-250					235-260		
BofAe EBITDA vs. Guidance (%)	(1.9%)								
CAFD Reconciliation									
Further Adjusted EBITDA	793.3	751.3	162.4	221.9	235.8	184.6	804.6	902.3	959.5
Dividends from Unconsolidated Affiliates	34.9	67.7	12.4	3.1	3.0	(6.4)	12.1	12.3	12.6
Non-Monetary Items	55.8	28.0	0.6	(2.4)	0.0	1.7	0.0	0.0	0.0
Interest and Income tax Paid	(342.3)	(277.3)	(30.2)	(108.7)	(77.3)	(93.0)	(309.1)	(334.9)	(346.0)
Principal Amortization of Indebtedness, Net of New Project									
Indebtedness	(319.0)	(348.3)	(30.5)	(103.9)	(69.8)	(75.0)	(279.3)	(345.2)	(368.6)
Deposits Into/Withdrawals From Debt Service Accounts	27.2	33.0	9.8	11.4	0.0	(21.2)	0.0	0.0	0.0
Change in Non-Restricted Cash at Project Companies	2.2	(61.7)	43.1	73.7	10.0	(86.8)	40.0	50.0	60.0
Dividends Paid to Non-Controlling Interests	(28.1)	(39.2)	(6.0)	(11.2)	(6.8)	(3.1)	(27.0)	(28.1)	(32.5)
Less: Total Tax Equity Payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Exhibit 5: AY Key Estimates

We outline our estimates of key metrics for AY in the coming years. Most recently, AY has struggled to deliver robust distribution growth, given minimal M&A transactions and delayed contribution from organic growth efforts. We expect muted distribution growth in the coming years, given current macro and sector pressures.

	2021A	2022A	1Q23	2Q23	3Q23	4Q23	2023E	2024E	2025E
Changes in Other Assets and Liabilities	1.5	102.9	(93.0)	(8.3)	0.6	102.9	2.2	2.2	2.2
Asset Refinancing & Other	0.0	0.0	(7.6)	(12.0)	0.0	19.7	0.0	0.0	0.0
Cash Available for Distribution (CAFD)	225.5	256.5	61.0	63.5	95.5	23.5	243.6	258.5	287.2
Guidance	220-240	230-250					235-260		
CAFD per Share	\$1.97	\$2.16	\$0.53	\$0.55	\$0.82	\$0.20	\$2.06	\$2.08	\$2.22
Growth	1%	10%	52%				-5%	1%	7%

Source: BofA Global Research, Bloomberg

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We update our applied discount rate to reflect the move in base rates; we now input a 4.8% 10-Yr treasury vs. 4.08% prior. We maintain our assumed 5% equity risk premium. We MtM the inputted 10-Yr credit default spreads (used to reflect financial risk in each of AY's operating geographies) have largely increased against the rise in interest rates. Together our blended discount rate moves to 10.38% from 8.78% prior.

Moreover, we refresh our valuation framework to align with closest peer, Clearway (CWEN). We now apply a blended dividend discount model (DDM) and DCF, maintaining growth weighting at 75% / 25% respectively. Given the challenged distribution growth per share in the last two years, we argue it is more reasonable to weight AY's valuation toward long term value, especially against this challenging macro and sector backdrop. We pivot our methodology to reflect the reduced confidence in growth for the YieldCo sector, which is also consistent with our treatment of NEP and CWEN for instance. Our DDM reflects just 3% dividend growth, consistent with the last three-year trend for shares. This is not a major methodology change with the \$21 DDM and \$23 DCF methodologies.

Together, the move in the 10-Yr treasury contributes a \$2/sh reduction in our PO, another \$2/sh reduction in the PO comes from estimate revisions. Our previous model implied a \$26/sh DCF value, which now moves to \$23/sh. The largest driver of our PO change comes from a compressed growth value, where our DDM now embeds much weaker growth; our updated growth forecast is consistent with recent historical performance but does not offer incremental credit, given strained sector backdrop.

Ultimately, we continue to view AY as attractive at current discounted valuation, despite sector headwinds and strategic review uncertainties. With shares trading at a healthy discount vs. our lower estimates, we flag a rare opportunity to capitalize on YieldCos trading below conservatively calculated DCF in our 8-yr coverage of the sector. Even with muted growth assumptions and conservative cost of capital assumptions, we continue to see a compelling entry point for shares, despite the large negative move in our PO.

A further increase in interest rates and an adverse reaction from the strategic review process will be negatives for shares, but we argue the 10% dividend yield, long term contracted profile, and hedged interest rate exposure offer some insulation to sector pressures today. With AY shares -31% YTD, we see relatively lower risk that AQN sells its stake in AY at this point. Reiterate Buy.

Exhibit 6: AY Valuation Summary

Lower PO to \$22

AY Valuation

	<u>Value/Sh</u>	<u>Weight</u>	Weighted Value
DDM Methodology	\$21.00	75%	\$15.75
DCF Methodology	\$23.00	25%	\$5.75
AY Value/Sh			\$22.00
Premium (Discount) to Current Price			19.0%

Premium (Discount) to Current Price

Exhibit 6: AY Valuation Summary

Lower PO to \$22

AY Valuation

2023E Dividend per Share	\$1.80
Total Potential Return	28.8%

Source: Company Filings, Bloomberg, & BofA Global Research

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Exhibit 7: AY DDM Valuation

DDM method implies \$21

Forward Dividend Yield Valuation

	2022A	2023E	2024E	2025E	2026E	2027E	2028E
DPS Growth		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Guidance on LT Trend							
DPS Growth	\$1.78	\$1.80	\$1.91	\$2.02	\$2.08	\$2.14	\$2.20
Terminal Value @ 2% Terminal Growth Rate							\$21.67
CAFD	256	244	259	287			
CAFD Guidance	230-250 2	235-260					
CAFD per Share	\$2.16	\$2.06	\$2.08	\$2.22			
Implied Payout Ratio	82%	88%	92%	91%			
Shares	119	119	124	130			
Discounted Cash Flows @ 2% terminal Growth							
Discount Factor		1.10	0.91	0.82	0.74	0.67	0.61
Discounted Cash Flows		\$1.99	\$1.73	\$1.66	\$1.55	\$1.44	\$14.57
Value/Unit		\$21.00					
Premium (Discount) to Unit Price		9.0%					
<u>Memo:</u>							
Terminal Value (2030E Required Yield)		12.38%					
Terminal Value Growth Rate		2.00%					
Discount Rate		10.38%					
Unit Price		\$17.50					
Source: Company Filings, Bloomberg, & BofA Global Resea	arch						

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Exhibit 8: AY DCF Valuation

DCF method implies \$23

DCF Valuation	\$Mn	\$/sh
Total PV of Cash Flows	3,020	\$25.49
Less: PV of Corporate Opex	(196)	(\$1.65)
Less: PV of Corporate Debt Interest	(61)	(\$0.51)
Less: PV of Corporate Debt Amortization	(464)	(\$3.92)
Less: PV of Spanish Rate Reset	(50)	(\$0.42)
Plus: PV of Restricted Project-Level Cash Release	77	\$0.65
Plus: Corporate Cash	61	\$0.51
Plus: Unrestricted Project-Level Cash	333	\$2.81
Total PV of Cash Flows (\$Mn)	2,719	\$22.95
Shares Outstanding (Mn)	118.5	
DCF per Share	\$23.00	
Share Price (As of 10/09/23)	\$17.50	
Premium / (Discount) to NPV	-24%	

Source: Company Filings, Bloomberg, & BofA Global Research

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Abbreviations:

AQN: Algonquin CWEN: Clearway ORA: Ormat

NEP: NextEra Energy Partners



RNW: TransAlta Renewables

BEP: Brookfield Renewable Energy Partners

HASI: Hannon Armstrong

Exhibit 9: Stock Mentioned

Stock prices and ratings mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
AY	AY US	Atlantica Sustain	US\$ 18.44	B-1-7
CWEN	CWEN US	Clearway Energy	US\$ 21.96	B-1-7
CWENA	CWEN/A US	Clearway Energy	US\$ 20.64	B-1-7
NEP	NEP US	NextEra Partners	US\$ 22.03	B-2-7
ORA	ORA US	Ormat Technologies	US\$ 68.28	B-2-7

Source: BofA Global Research

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Price objective basis & risk

Atlantica Sustainable Infrastructure (AY)

Our \$22/sh PO is based on a 75% DDM valuation and 25% DCF valuation. Our Growth value is \$21 (weighted 75%). Our DCF value is \$23 (weighted 25%). We continue to reflect disproportionate focus on core asset cash flows, and perceived growth remains interesting but less compelling, given the current interest rate and operating environment across the market.

Assumptions in our DCF valuation are:

- A 10.38% discount rate calculated using CAPM methodology, along with country risk (125bps) and company-specific (100bps) premiums.
- 2.5% annual escalator in corporate expenses

Main assumptions in our DDM valuation are:

- Run-rate CAFD generated by the current portfolio of \$240 Mn
- 3% annual distribution per share growth, which is based on 3-yr historic average for the portfolio

Downside risks are 1) the company may not be able to access capital markets at favorable terms, 2) the company may not be able to make accretive acquisition opportunities to fuel growth, 3) the company may not be able to grow DPS at the targeted growth rate, 4) the company may not be able to sustain its current dividend levels, and dividend yield could increase, 5) PCG related counterparty exposure is among the nearest exposures to watch.

Clearway Energy (CWENA / CWEN)

Our \$27/sh\$ PO is based on 67/33 weighted DDM/DCF methodologies. Our DDM value is \$30 and our DCF value is \$20. We use a 67% weighting to reflect disproportionate focus on existing and future yield over core asset cash flows. Perceived growth remains the prevailing methodology employed across the market.

In our DCF, we discount the current portfolio's expected cash flows. Main assumptions include:

- Our 8.63% cost of equity applies a CAPM methodology and includes 1.0% company-specific premium
- Outstanding corporate debt is assumed to be refinanced and amortized on a 20-year term.



Assumptions under our DDM approach are:

- 8.0% growth through 2026
- A 2.0% required yield based on the 2023E dividend yield for the YieldCo peer set.

Risks are 1) misalignment between the new sponsor and the company's growth strategy, 2) the inability to purchase high-quality assets at accretive multiples, 3) the failure to successfully develop projects, 4) the inability to access capital markets at attractive terms, and 5) PCG related counterparty exposure is among the nearest exposures to watch.

NextEra Energy Partners (NEP)

Our \$30/unit PO is based on a 33%/67% weighted forward dividend yield model/discounted cash flow (DCF) methodology. Our value for DDM is \$51 (weighted 33%) and our value for DCF is \$19 (weighted 67%).

Main assumptions in our Dividend Discount Model are:

- Growing annualized 2023 \$3.38 DPU at 6.0% annually through 2028
- Capitalizing DPU at a 2.0% required growth rate beyond '28 and 11.33% terminal yield
- Discounting terminal value and interim dividends back to 2023 using a CAPM-derived discount rate.

Main DCF assumptions are

- Our 9.33% cost of equity is calculated with CAPM methodology.
- Corporate Opex of \$25 Mn in 2021, escalating at 2.0% per year.
- PPA escalators of 1.0% across the portfolio
- No taxes for the next 15 years.
- Outstanding corporate debt is refinanced at maturity with amortizing debt with a 15-year term

Risks to achievement of the PO are changes in: 1) access to capital markets, 2) distribution per unit growth, 3) M&A, 4) natural disasters and solar/wind resource quality, 5) tax laws, 6) incentive distribution rights [IDRs], and 7) interest rates.

Ormat Technologies (ORA)

Our \$87/sh PO is based on a DCF + DevCo methodology, with a DCF value of \$49/sh plus a DevCo value of \$38/sh.

In our DCF, we discount the existing portfolio's expected cash flows. Main assumptions include a 7.47% Cost of Equity with 0.94 adj. beta and 3.77% 10-yr Treasury under the CAPM (with project-specific adjustments, 2% international risk premium and 0.5% development premium).

In our DevCo, we value long-term growth prospects with the assumption of geothermal value at \$1.75mn/MW and battery storage at \$0.33Mn/MWhr. Our long-term assumptions are slightly lower than mgmt.'s Analyst Day targets given operational challenges. We apply an 11x terminal value, akin to where ORA has traded historically, and discount the value created in each year back to today at a 12% cost of equity capital. Additionally, we include the NPV of future storage investment tax credits. We also discount these credits back at a 12% rate.

Risks: 1) operational issues including planned/unexpected maintenance costs and shutdowns, 2) geological uncertainties and catastrophic events incl. earthquakes and volcanoes, 3) international exposure with higher credit, financial, political, and regulatory risks, and 4) re-contracting price risks 5) Ability to execute in a nascent storage segment.



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

estment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
Υ				
	Alliant Energy Corporation	LNT	LNT US	Julien Dumoulin-Smith
	Ameren Corporation	AEE	AEE US	Julien Dumoulin-Smith
	Ameresco	AMRC	AMRC 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
	Bloom Energy	BE	BE US	Julien Dumoulin-Smith
	CenterPoint Energy	CNP	CNP US	Julien Dumoulin-Smith
	ChargePoint Holdings	CHPT	CHPT US	Alex Vrabel
	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 US	,
	CMS Energy Consolidated Edison	CMS ED		Julien Dumoulin-Smith
			ED US	Julien Dumoulin-Smith
	DTE Energy	DTE	DTE US	Julien Dumoulin-Smith
	Duke Energy	DUK	DUK US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	ENLT	ENLT US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	XENLF	ENLT IT	Julien Dumoulin-Smith
	Exelon	EXC	EXC US	Paul Zimbardo
	First Solar, Inc.	FSLR	FSLR US	Julien Dumoulin-Smith
	FREYR Battery	FREY	FREY US	Julien Dumoulin-Smith
	FTC Solar	FTCI	FTCI US	Julien Dumoulin-Smith
	Hannon Armstrong	HASI	HASI US	Julien Dumoulin-Smith
	Hydro One	YH	H CN	Dariusz Lozny, CFA
	Maxeon Solar Technologies	MAXN	MAXN US	Julien Dumoulin-Smith
	MDU Resources Group, Inc.	MDU	MDU US	Dariusz Lozny, CFA
	Nextracker Inc	NXT	NXT US	Julien Dumoulin-Smith
	NiSource Inc	NI	NI US	Julien Dumoulin-Smith
	NorthWestern Corporation	NWE	NWE US	Julien Dumoulin-Smith
		NRG	NRG US	Julien Dumoulin-Smith
	NRG Energy			,
	PG&E Corporation	PCG	PCG US	Julien Dumoulin-Smith
	PNM Resources Inc.	PNM	PNM US	Julien Dumoulin-Smith
	Portland General Electric Company	POR	PORUS	Julien Dumoulin-Smith
	PPL Corporation	PPL	PPL US	Paul Zimbardo
	Public Service Enterprise Group	PEG	PEG US	Julien Dumoulin-Smith
	ReNew Power	RNW	RNW US	Julien Dumoulin-Smith
	Sempra Energy	SRE	SRE US	Julien Dumoulin-Smith
	Sunnova Energy	NOVA	NOVA US	Julien Dumoulin-Smith
	SunRun	RUN	RUN US	Julien Dumoulin-Smith
	TPI Composites	TPIC	TPIC US	Julien Dumoulin-Smith
	Vistra Energy	VST	VST US	Julien Dumoulin-Smith
	WEC Energy Group Inc	WEC	WEC US	Julien Dumoulin-Smith
	Xcel Energy Inc	XEL	XEL US	Julien Dumoulin-Smith
ITRAL		· 		,
'I INAL	AES	AES	AES US	Julien Dumoulin-Smith
	Algonquin Power & Utilities Corp	AQN	AQN US	Dariusz Lozny, CFA
	Algonquin Power & Utilities Corp	YAQN		Dariusz Lozny, CFA Dariusz Lozny, CFA
		-	AQN CN	
	AltaGas	YALA	ALA CN	Dariusz Lozny, CFA
	American Electric Power	AEP	AEP US	Julien Dumoulin-Smith
	Constellation Energy Corp	CEG	CEG US	Paul Zimbardo
	Emera Inc	YEMA	EMA CN	Dariusz Lozny, CFA
	Entergy	ETR	ETR US	Paul Zimbardo
	Essential Utilities	WTRG	WTRG US	Julien Dumoulin-Smith
	Evergy, Inc	EVRG	EVRG US	Julien Dumoulin-Smith

North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
	Fluence Energy	FLNC	FLNC US	Julien Dumoulin-Smith
	ldacorp	IDA	IDA US	Paul Zimbardo
	New Fortress Energy	NFE	NFE US	Cameron Lochridge
	NextEra Energy	NEE	NEE US	Julien Dumoulin-Smith
	NextEra Energy Partners	NEP	NEP US	Julien Dumoulin-Smith
	Northwest Natural Holdings	NWN	NWN US	Julien Dumoulin-Smith
	OGE Energy Corp	OGE	OGE US	Julien Dumoulin-Smith
	ONE Gas, Inc.	OGS	OGS US	Julien Dumoulin-Smith
	Ormat Technologies	ORA	ORA US	Julien Dumoulin-Smith
	Pinnacle West	PNW	PNW US	Julien Dumoulin-Smith
	SolarEdge Technologies	SEDG	SEDG 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	Dariusz Lozny, CFA
	TransAlta Corporation	YTA	TA CN	Dariusz Lozny, CFA
IINDEDDEDEDDA	'			•
UNDERPERFORM	A.H			
	Allete Inc	ALE	ALE US	Julien Dumoulin-Smith
	American Water Works	AWK	AWK US	Julien Dumoulin-Smith
	Avangrid	AGR	AGR US	Paul Zimbardo
	Avista	AVA	AVA US	Julien Dumoulin-Smith
	Black Hills Corporation	BKH	BKH 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	Dariusz Lozny, CFA
	Fortis Inc	FTS	FTS US	Dariusz Lozny, CFA
	Generac Holdings Inc.	GNRC	GNRC US	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
	Spire	SR	SR US	Julien Dumoulin-Smith
	Stem, Inc.	STEM	STEM US	Julien Dumoulin-Smith
	SunPower Corp.	SPWR	SPWR US	Julien Dumoulin-Smith
	Tellurian Inc	TELL	TELL US	Julien Dumoulin-Smith
	UGI Corp.	UGI	UGIUS	Julien Dumoulin-Smith

Qmethod [™] Measures Definitions

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



Valuation Toolkit Numerator Denominator

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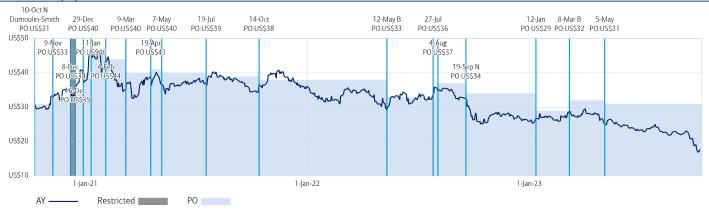
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Disclosures

Important Disclosures

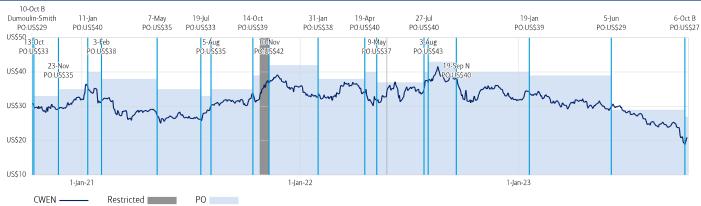
Atlantica Sustain (AY) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

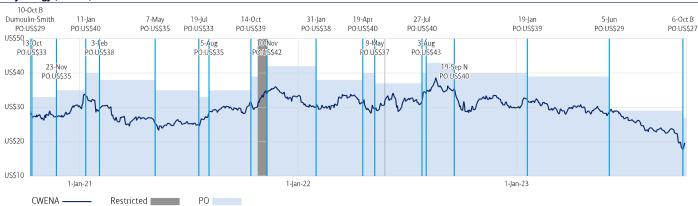
Clearway Energy (CWEN) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Clearway Energy (CWENA) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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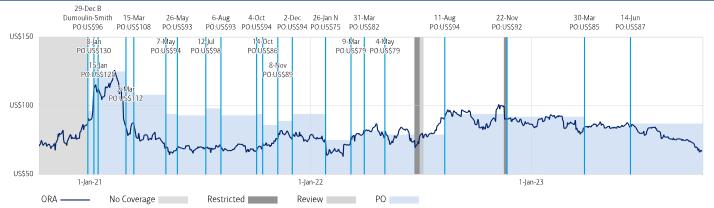
NextEra Partners (NEP) Price Chart



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Ormat Technologies (ORA) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Equity Investment Rating Distribution: Alternative Energy Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	12	70.59%	Buy	10	83.33%
Hold	3	17.65%	Hold	2	66.67%
Sell	2	11.76%	Sell	1	50.00%

Equity Investment Rating Distribution: Utilities Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	80	51.28%	Buy	51	63.75%
Hold	42	26.92%	Hold	32	76.19%
Sell	34	21.79%	Sell	22	64.71%

Equity Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1869	53.48%	Buy	1046	55.97%
Hold	828	23.69%	Hold	461	55.68%
Sell	798	22.83%	Sell	370	46.37%

Issuers that were investment banking dients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.



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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%
 ≤ 70%

 Neutral
 ≥ 0%
 ≤ 30%

 Underperform
 N/A
 ≥ 20%

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

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