

## Sunnova Energy

## 2024 looks bright with potential EBITDA upside: multi-faceted derisk &amp; recovery

Reiterate Rating: BUY | PO: 17.00 USD | Price: 13.58 USD

## The most visible way to play offense in resi solar

We maintain Buy on Sunnova Energy (NOVA) shares. NOVA stands alone in our residential solar coverage in affirming positive volumetric growth expectations for 2024 while still maintaining profit discipline. Widening spread between 13% target fully burdened unlevered return and lower cost of debt could endure if rates continue to fall, though NOVA would likely adjust targets to cost of capital environment to continue driving originations growth. We expect to continue seeing steady tilting to leases and PPAs versus loans (70-75% lease/PPA to loan mix for solar only customers).

## Loan portfolio monetization an option to tender converts

Despite NOVA nearly doubling since October lows on rate tailwinds and renewed solar optimism, we still find investors to be largely concerned with NOVA's ability to manage upcoming 2026-2028 maturities. Monetizing recent customer loans priced at a premium to par could provide liquidity to tender/paydown 2026 converts yielding 16% at \$575Mn notional value. Gains & overall upside to estimates support refi, enabling 4Q results to be a further positive catalyst for shares given recent momentum. This would support visibly higher EBITDA on gain-on-sale; we remain well above Street on our '24 ests.

## Multiple sources of 2024 EBITDA upside

Our discussion with CFO Robert Lane indicated there could be several avenues of upside to NOVA's 2024 EBITDA guidance of \$350-450Mn. First, mgmt. remains keenly focused on driving operational efficiency, with cost structure also benefiting from falling equipment pricing. Second, loan portfolio monetization of recent loans with a premium value to par could drive higher gains-on-sale flowing through EBITDA. Third, ITC sales are expected to represent 15-20% of FY24 EBITDA (implying \$50-90Mn of ITC-related EBITDA); on the 4Q23 call we expect NOVA to provide more detailed commentary on the cadence of how these sales are recognized throughout the year and whether there may be potential upside from conservative guidance.

## PO to \$17 on lower interest rates, cost of capital

We raise our PO to \$17 from \$15 prior, primarily reflecting updated assumptions for lower cost of debt in line with steadily lower rates since November. We still see a ~20% average levered free cash flow yield, continuing to use a 15% levered discount rate, still in line with its implied equity hurdle rate. For growth, we conservatively still use a 19% discount rate despite the yield on NOVA's convertible debt declining 300bps since our last update. Shares are down -11% YTD despite NOVA's upbeat outlook for 2024.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	(1.19)	(1.06)	(1.78)	(1.40)	(1.62)
EPS Change (YoY)	58.5%	10.9%	-67.9%	21.3%	-15.7%
Consensus EPS (Bloomberg)			(2.09)	(1.29)	(1.13)
DPS	0	0	0	0	0
Valuation (Dec)					
EV / EBITDA*	132.9x	95.6x	47.6x	27.4x	25.3x
Free Cash Flow Yield*	-45.9%	-74.2%	-133.3%	-147.5%	-147.8%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 9.

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Timestamp: 05 January 2024 05:01AM EST

05 January 2024

## Equity

## Key Changes

(US\$)	Previous	Current
Price Obj.	15.00	17.00
2023E Rev (m)	778.4	798.9
2024E Rev (m)	945.2	1,078.1
2025E Rev (m)	988.6	1,337.8
2023E EPS	-0.55	-1.78
2024E EPS	-0.11	-1.40
2025E EPS	2.25	-1.62

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## Stock Data

Price	13.58 USD
Price Objective	17.00 USD
Date Established	5-Jan-2024
Investment Opinion	C-1-9
52-Week Range	7.62 USD - 24.56 USD
Mrkt Val (mn) / Shares Out (mn)	1,662 USD / 122.4
Free Float	86.7%
Average Daily Value (mn)	73.33 USD
BofA Ticker / Exchange	NOVA / NYS
Bloomberg / Reuters	NOVA US / NOVA.N
ROE (2023E)	-16.8%
Net Dbt to Eqty (Dec-2022A)	267.5%
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"](#).

# iQprofile<sup>SM</sup> Sunnova Energy

## iQmethod<sup>SM</sup> – Bus Performance\*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	-1.1%	1.3%	-1.0%	0.3%	0.5%
Return on Equity	-12.6%	-9.8%	-16.8%	-14.5%	-18.6%
Operating Margin	-22.7%	17.4%	-12.9%	3.5%	7.4%
Free Cash Flow	(764)	(1,234)	(2,215)	(2,451)	(2,457)

## iQmethod<sup>SM</sup> – Quality of Earnings\*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	NM	NM	NM	NM	NM
Asset Replacement Ratio	6.5x	8.0x	15.3x	13.5x	11.5x
Tax Rate	NM	NM	NM	NM	NM
Net Debt-to-Equity Ratio	186.4%	267.5%	256.9%	239.7%	233.0%
Interest Cover	-0.7x	1.3x	-1.0x	0.2x	0.3x

## Income Statement Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Sales	242	558	799	1,078	1,338
% Change	50.3%	130.7%	43.3%	34.9%	24.1%
Gross Profit	222	521	731	987	1,243
% Change	53.7%	134.5%	40.4%	34.9%	26.0%
EBITDA	86	119	239	416	451
% Change	43.7%	39.0%	100.8%	73.9%	8.3%
Net Interest & Other Income	(92)	(69)	(102)	(199)	(284)
<b>Net Income (Adjusted)</b>	<b>(135)</b>	<b>(121)</b>	<b>(205)</b>	<b>(161)</b>	<b>(186)</b>
<b>% Change</b>	<b>46.5%</b>	<b>10.2%</b>	<b>-69.1%</b>	<b>21.4%</b>	<b>-15.1%</b>

## Free Cash Flow Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	(148)	(154)	(205)	(161)	(186)
Depreciation & Amortization	86	108	121	165	201
Change in Working Capital	(227)	(346)	(432)	(435)	(356)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	79	27	155	196	204
Capital Expenditure	(555)	(868)	(1,855)	(2,216)	(2,321)
<b>Free Cash Flow</b>	<b>-764</b>	<b>-1,234</b>	<b>-2,215</b>	<b>-2,451</b>	<b>-2,457</b>
<b>% Change</b>	<b>-7.6%</b>	<b>-61.5%</b>	<b>-79.6%</b>	<b>-10.7%</b>	<b>-0.2%</b>
Share / Issue Repurchase	0	0	0	0	1
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	1,221	2,115	1,891	2,267	2,381

## Balance Sheet Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	243	360	223	409	622
Trade Receivables	76	237	237	237	202
Other Current Assets	296	351	587	838	838
Property, Plant & Equipment	2,907	3,785	5,419	7,346	9,380
Other Non-Current Assets	1,979	3,604	4,822	5,951	7,161
<b>Total Assets</b>	<b>5,501</b>	<b>8,337</b>	<b>11,288</b>	<b>14,781</b>	<b>18,204</b>
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	137	256	179	224	269
Long-Term Debt	3,265	5,409	7,326	9,621	12,035
Other Non-Current Liabilities	480	784	1,019	1,092	998
<b>Total Liabilities</b>	<b>3,883</b>	<b>6,449</b>	<b>8,523</b>	<b>10,938</b>	<b>13,302</b>
<b>Total Equity</b>	<b>1,622</b>	<b>1,887</b>	<b>2,765</b>	<b>3,843</b>	<b>4,899</b>
<b>Total Equity &amp; Liabilities</b>	<b>5,504</b>	<b>8,337</b>	<b>11,288</b>	<b>14,781</b>	<b>18,201</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 9.

## Company Sector

Alternative Energy

## Company Description

Founded in 2012, Sunnova (NOVA) is a technology-agnostic residential solar service provider headquartered in Houston, TX. Similar to residential solar service provider peer SunRun (RUN), NOVA principally finances, installs, services, and owns solar panel and battery storage systems on residential customer premises.

## Investment Rationale

We are Buy rated on NOVA as we see value in shares with the company offering an optimistic growth outlook for 2024 and benefitting from declining rates. We emphasize prospective storage attachment, and limited absolute exposure to a downside case in California as supporting a value in a stock where very little growth is embedded into the current valuation.

## Stock Data

Average Daily Volume

5374,794

## Quarterly Earnings Estimates

	2022	2023
Q1	-0.70A	NAE
Q2	-0.74A	NAE
Q3	-0.55A	NAE
Q4	0.55A	NAE

## Our Updated Takes on the 2024 Path

We hosted CFO Robert Lane for a lively discussion of NOVA's opportunity set ahead of 4Q23 earnings and how the company views progress in its value creation strategy. We have a reinvigorated view of shares heading into 4Q considering the multiple pathways to a positive surprise. Clearly the overall backdrop remains supportive with lower rates to a positive update at the outset, however organic improvements to EBITDA thru cost efficiencies as well as further gains-on-sale from loans should all prove constructive. We see a pivot towards monetizing loans at a gain as illustrating financial strength and tools to address maturities, itself a positive factor independent of the total quantum of proceeds raised. It appears that management remains focused on divesting those loans that would produce a gain (eg: '23 vintage), and hence flow thru EBITDA, rather than loans originated in a lower rate environment (and corresponding sold at a loss). Bottom line, there is a finite pool of loans eligible as well as other unsecuritized cash flows that could yet be sold in '24. Stay tuned.

We see the following as primary takeaways:

1. **The focus on rates is appropriate & constructive of late.** The primary catalyst for NOVA's performance is likely to be the pace of decline in interest rates and cost of capital. Not only do lower rates support residential solar customer demand, but they also provide a meaningful tailwind to the value of recently originated customer loans that can be monetized for redeployment toward corporate debt while a gain on sale is demonstrably accretive to adjusted EBITDA. Look for temporary opportunities after rate movements for NOVA's spread between fully levered unburdened returns currently targeted at 13% and declining cost of debt to widen, though NOVA expects to adjust its target returns to cost of capital over time so as to support origination and improve customer economics. Generally speaking, NOVA would rather use opportunities from lower equipment costs or other factors to improve project economics versus potentially harming originations by pricing too far above current cost of capital realities. NOVA also has strong hedging to lock in whatever attractive spreads it can at time of origination and construction; recall, NOVA does not officially count a new customer until an installation is placed into service with permission to operate from the utility.
2. **Loan portfolio monetization will be front and center to the story in 2024: see sales coming in medium term to prove out concept and address maturities in part too.** Consternation over the upcoming maturities from 2026 to 2028 remains a concern for investors, and NOVA is keenly aware of the opportunity not only to reduce corporate level debt but also demonstrate EBITDA generation through monetization of recent loans whose premiums to par have further improved with declining rates. NOVA describes the more recent vintages of its loans to have been priced to profitability at interest rate levels 100 basis points higher than they are today, implying a meaningful profit spread for debt retirement. Still, while constructive for both the income statement and balance sheet, we expect asset sales to be steadily effected throughout the interim period between now and NOVA's initial maturities in 2026. NOVA's \$575Mn convertible debt maturing December 2026 is currently priced at 65c on the dollar.
3. **NOVA appears (more than) comfortable with growth specified in 4Q23 and 2024 guidance: see upside bias here too.** With most in the residential solar space issuing cautious expectations for negative volume growth in 2024, NOVA has explicitly maintained its expectation for positive growth for both installations and ancillary products and services. NOVA cites general utility rate inflation that is expected to possibly worsen as the look-back period for higher commodity costs over the past two years affect power prices, as well as the company's relatively higher share of several growthier solar markets as positive indicators heading into next year. Despite there being general concerns of the associated profitability of



this growth, NOVA remains committed to a long view of the associated economics, and has several avenues of growth that are not as capital intensive as peers, including service-only customers that may have used another loan provider that does not provide the extensive suite of services NOVA can offer. Generally PPA and lease activity is more prominent in the still high cost of capital environment, but NOVA insists the solar loan math still works, with higher interest loans providing a benefit of higher prepayment rates to NOVA. Given this backdrop, NOVA is well positioned to take share, particularly in the lease / PPA market.

## We tweak our updated estimates ahead of 4Q23

We provide our updated headline metrics for NOVA below. Our estimates are generally in line with NOVA guidance for both 4Q23 and 2024, and remain above consensus for new customer additions and EBITDA. We have made several adjustments, including lower assumed cost of debt in line with the decline in interest rates, more modest customer growth for 2024 in line with NOVA guidance reflecting further caution given generally low residential solar expectations, and lower principal and interest (P&I) reflecting higher mix for PPA/leases versus loans and modestly lower prepayment rate for loans.

Extent of upside remains unclear, but we perceive our \$415 Mn EBITDA estimate for '24 could yet be conservative considering range of \$350-450 Mn. We perceive clear latitude for management to bias at or above the higher end of its range. Admittedly from a cash perspective, pre-payments could continue to underwhelm limiting corresponding P&I guidance. Anticipate management will leverage robust backdrop on guidance to avoid excluding any cash items from Adj EBITDA to ensure confidence in outlook (only non-cash items likely excluded for '24).

### Exhibit 1: Sunnova Guidance – BofA vs Consensus

Conservatively reducing customer growth to lower end of 2024 guidance; still above consensus

	FY23 Metrics				FY24 Metrics			
	2023 BofA Est	2023 Prior BofA Est	2023 Cons Est	FY23 Guidance	2024 BofA Est	2024 Prior BofA Est	2024 Cons Est	FY24 Guidance
New Customer Additions	144,500	147,569	141,694	135-145	188,375	196,683	179,846	185-195
Adj. EBITDA	\$239	\$232	\$204	235-255	\$416	\$416	\$351	350-450
P&I	\$268	\$316	\$288	260-300	\$426	\$481	\$438	360-440
Principal	\$156	\$187		150-190	\$247	\$295		210-250
Interest	\$112	\$129		110-120	\$180	\$186		150-190

Source: BofA Global Research, Visible Alpha, Company reports

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## Valuation: not much growth priced in at current levels

Below we detail our updated sum-of-the-parts valuation for NOVA. We continue to use a 15% discount rate for NOVA's OpCo resulting in an unchanged overall ~\$12/sh, reflecting inclusion of updated cash, CWIP, and inventory balances following 3Q23 earnings.

We principally detail our growth below where we continue to use an elevated 19% discount rate out of an abundance of conservatism considering NOVA's convertible debt currently yields 16%. Our assumptions for stronger returns primarily associated with lower cost of borrowing drive an increase in our attribution to growth to \$5/sh versus \$2/sh prior.

*We remain confident in overall volumetric growth trends despite a likely underwhelming trend for the wider sector in '24.*

### Exhibit 2: NOVA SOTP

OpCo \$12/sh, growth now \$5/sh = Total is \$17

Discount Rate	19.0%						
Year Ending	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	12/31/2029
	2023	2024	2025	2026	2027	2028	2029
<b>Solar Lease / PPA</b>							
Customers	57,317	72,604	81,589	82,246	82,148	87,802	91,303
MW added	424	508	571	576	575	615	639
Unlevered IRR Solar	12.9%	14.2%	13.6%	12.9%	12.5%	12.4%	12.3%
Unlevered IRR Storage	8.5%	9.0%	7.9%	7.6%	8.9%	8.4%	8.7%
Storage Attach Rate	35.0%	50.0%	60.0%	60.0%	60.0%	60.0%	60.0%
NPV / W Unlevered (6% Discount Rate)	\$1.45	\$1.57	\$1.39	\$1.20	\$1.17	\$1.13	\$1.12
NPV / W Levered (10% discount rate)	\$0.69	\$0.76	\$0.61	\$0.49	\$0.47	\$0.45	\$0.45
Value Created (\$mm)	\$292	\$386	\$348	\$281	\$271	\$277	\$291
Implied Multiple on Value Created (EV / Unlevered Cash Flow)	13.8x	13.9x	13.1x	12.8x	12.8x	12.8x	12.9x
<b>Solar Loan</b>							
Customers	32,155	30,045	29,953	37,041	44,450	46,672	49,006
MW added	244	240	240	296	356	373	392
Unlevered IRR Solar	11.0%	10.8%	11.8%	10.5%	10.5%	10.5%	10.5%
Unlevered IRR Storage	12.4%	12.2%	13.3%	12.0%	12.0%	12.0%	12.0%
Storage Attach Rate	20.0%	35.0%	50.0%	50.0%	50.0%	50.0%	50.0%
NPV / W Unlevered (6% Discount Rate)	\$1.40	\$1.30	\$1.35	\$0.79	\$0.79	\$0.79	\$0.79
NPV / W Levered (10% discount rate)	\$0.74	\$0.92	\$0.89	\$0.36	\$0.36	\$0.36	\$0.36
Value Created (\$mm)	\$180	\$221	\$214	\$107	\$128	\$134	\$141
<b>Accessory Loan</b>							
Customers	40,000	64,000	76,800	88,320	101,568	116,803	128,484
Assumed Customer Balance	\$6,000	\$8,000	\$10,000	\$12,000	\$12,000	\$12,000	\$12,000
NPV per Customer (10% Discount Rate)	\$171	\$227	\$284	\$341	\$341	\$341	\$341
Value Created (\$mm)	\$7	\$15	\$22	\$30	\$35	\$40	\$44
Service Customers	12,000	18,000	27,000	40,500	60,750	91,125	136,688
Cash Sales	3,028	3,726	5,014	5,766	6,631	7,626	7,626
<b>Total Customers</b>	<b>144,500</b>	<b>188,375</b>	<b>220,356</b>	<b>253,874</b>	<b>295,547</b>	<b>350,029</b>	<b>413,105</b>



**Exhibit 2: NOVA SOTP**

OpCo \$12/sh, growth now \$5/sh = Total is \$17

<b>Discount Rate</b>	<b>19.0%</b>						
<b>Memo Total Solar Customers</b>	<b>89,472</b>	<b>102,649</b>	<b>111,542</b>	<b>119,287</b>	<b>126,597</b>	<b>134,474</b>	<b>140,308</b>
<b>Total Customer Growth</b>		<b>30%</b>	<b>17%</b>	<b>15%</b>	<b>16%</b>	<b>18%</b>	<b>18%</b>
<b>Blended IRR Solar Leases</b>	<b>12.3%</b>	<b>13.0%</b>	<b>12.2%</b>	<b>11.7%</b>	<b>11.7%</b>	<b>11.6%</b>	<b>11.6%</b>
<b>Blended IRR Solar Loans</b>	<b>11.2%</b>	<b>11.0%</b>	<b>12.1%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>
<b>IRR Accessory Loans</b>	<b>9.8%</b>	<b>9.8%</b>	<b>9.8%</b>	<b>9.8%</b>	<b>9.8%</b>	<b>9.8%</b>	<b>9.8%</b>
<b>Weighted Average Return</b>	<b>11.5%</b>	<b>11.6%</b>	<b>11.5%</b>	<b>10.8%</b>	<b>10.8%</b>	<b>10.8%</b>	<b>10.8%</b>
<b>Cost of Debt Solar Lease / PPA</b>	<b>7.0%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>7.5%</b>
<b>Cost of Debt Solar Loan</b>	<b>7.7%</b>	<b>7.3%</b>	<b>7.3%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>7.5%</b>
<b>Cost of Debt Accessory Loans</b>	<b>7.8%</b>	<b>7.8%</b>	<b>7.8%</b>	<b>7.8%</b>	<b>7.8%</b>	<b>7.8%</b>	<b>7.8%</b>
<b>Weighted Average Cost of Debt</b>	<b>7.4%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>7.6%</b>	<b>7.6%</b>	<b>7.6%</b>	<b>7.6%</b>
<b>Spread on Origination</b>	<b>4.1%</b>	<b>4.1%</b>	<b>4.0%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>
<b>Total Value Generated (ex Service Customers)</b>	<b>\$479</b>	<b>\$622</b>	<b>\$584</b>	<b>\$417</b>	<b>\$434</b>	<b>\$452</b>	<b>\$476</b>
<b>Less Cash G&amp;A and SBC Opex (\$mm)</b>	<b>(\$229)</b>	<b>(\$261)</b>	<b>(\$393)</b>	<b>(\$420)</b>	<b>(\$434)</b>	<b>(\$437)</b>	<b>(\$431)</b>
<b>Total Value Generated</b>	<b>\$250</b>	<b>\$361</b>	<b>\$191</b>	<b>(\$3)</b>	<b>(\$0)</b>	<b>\$15</b>	<b>\$44</b>
<b>Discounted Value</b>	<b>\$210</b>	<b>\$255</b>	<b>\$113</b>	<b>(\$1)</b>	<b>(\$0)</b>	<b>\$5</b>	<b>\$13</b>
<b>Discounted Value Created Through 2029 (\$mm)</b>	<b>\$594</b>						
<b>Terminal Multiple</b>	<b>6.0x</b>						
<b>Terminal Value (Discounted) (\$mm)</b>	<b>\$66</b>						
<b>Total Value</b>	<b>\$660</b>						
<b>\$/sh</b>	<b>5</b>						
<b>Shares Outstanding</b>	<b>120</b>						
<b>OpCo Value Including Net Debt</b>	<b>\$12</b>						
<b>Price Objective \$/sh</b>	<b>\$17</b>						

Source: BofA Global Research Estimates, Company filings, Bloomberg

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## Price objective basis & risk

### Sunnova Energy (NOVA)

We raise our price objective to \$17/share from \$15/share prior, reflecting benefits from lower cost of capital. We value the PowerCo portion of the company by taking NPV of Net Customer Value (excl. Net Cash), equivalent to discounting cash flows from the existing asset base by a 15% discount rate. This equates to \$11/sh.

We value expected future installed assets through 2029 on a DCF basis with value created discounted to present at a 19% cost of equity assumption. Including a 6x terminal value multiple on 2029E NPV and the NPV of G&A expense, including non-cash SBC costs and future expected corp capital needs, this equates to \$5/sh.

Downside risks to PO being achieved: NOVA is particularly exposed to rate sensitivity, credit spreads, net metering policies, and risk of broadly competitive environment for customer acquisition squeezing development margins.

Upside risks to PO being achieved: Better than expected recovery in rates and capital market conditions, better than expected growth prospects, better NEM 3.0 outcome, and if the ITC is extended beyond the current schedule.

## 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
<b>BUY</b>				
	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
	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
	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
	Hydro One	YH	H CN	Dariusz Lozny, CFA
	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 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
	Portland General Electric Company	POR	POR US	Julien Dumoulin-Smith
	PPL Corporation	PPL	PPL US	Paul Zimbardo
	Public Service Enterprise Group	PEG	PEG US	Julien Dumoulin-Smith
	Sempra Energy	SRE	SRE US	Julien Dumoulin-Smith



## North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	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
	Xcel Energy Inc	XEL	XEL US	Julien Dumoulin-Smith
<b>NEUTRAL</b>				
	AES	AES	AES US	Julien Dumoulin-Smith
	Algonquin Power & Utilities Corp	AQN	AQN US	Dariusz Lozny, CFA
	Algonquin Power & Utilities Corp	YAQN	AQN CN	Dariusz Lozny, CFA
	AltaGas	YALA	ALA CN	Dariusz Lozny, CFA
	Ameren Corporation	AEE	AEE US	Julien Dumoulin-Smith
	Ameresco	AMRC	AMRC US	Julien Dumoulin-Smith
	American Electric Power	AEP	AEP US	Julien Dumoulin-Smith
	Bloom Energy	BE	BE US	Julien Dumoulin-Smith
	ChargePoint Holdings	CHPT	CHPT US	Cameron Lochridge
	Constellation Energy Corp	CEG	CEG US	Paul Zimbardo
	Emera Inc	YEMA	EMA CN	Dariusz Lozny, CFA
	Essential Utilities	WTRG	WTRG US	Julien Dumoulin-Smith
	Evergy, Inc	EVERG	EVERG US	Julien Dumoulin-Smith
	Exelon	EXC	EXC US	Paul Zimbardo
	Generac Holdings Inc.	GNRC	GNRC US	Julien Dumoulin-Smith
	Idacorp	IDA	IDA US	Paul Zimbardo
	Maxon Solar Technologies	MAXN	MAXN US	Julien Dumoulin-Smith
	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
	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
	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
<b>UNDERPERFORM</b>				
	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
	FREYR Battery	FREY	FREY US	Julien Dumoulin-Smith
	FTC Solar	FTCI	FTCI 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
	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	UGI US	Julien Dumoulin-Smith
	WEC Energy Group Inc	WEC	WEC US	Julien Dumoulin-Smith



## **iQmethod<sup>SM</sup> Measures Definitions**

### **Business Performance**

Return On Capital Employed

Return On Equity  
Operating Margin  
Earnings Growth  
Free Cash Flow

### **Quality of Earnings**

Cash Realization Ratio  
Asset Replacement Ratio  
Tax Rate  
Net Debt-To-Equity Ratio  
Interest Cover

### **Valuation Toolkit**

Price / Earnings Ratio  
Price / Book Value  
Dividend Yield  
Free Cash Flow Yield  
Enterprise Value / Sales

EV / EBITDA

### **Numerator**

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income  
Operating Profit  
Expected 5 Year CAGR From Latest Actual  
Cash Flow From Operations – Total Capex

### **Numerator**

Cash Flow From Operations  
Capex  
Tax Charge  
Net Debt = Total Debt – Cash & Equivalents  
EBIT

### **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  
Enterprise Value

### **Denominator**

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill  
Amortization  
Shareholders' Equity  
Sales  
N/A  
N/A

### **Denominator**

Net Income  
Depreciation  
Pre-Tax Income  
Total Equity  
Interest Expense

### **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

Basic EBIT + Depreciation + Amortization

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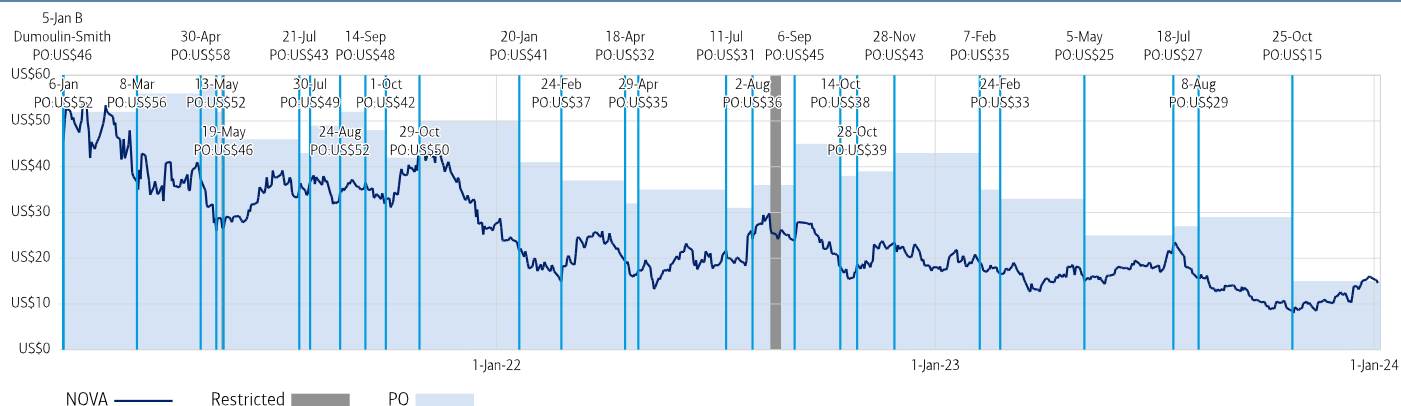
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### Equity Investment Rating Distribution: Alternative Energy Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	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 <sup>R1</sup>	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%

<sup>R1</sup> Issuers that were investment banking clients 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 <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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