

Atlantica Sustainable Infrastructure
NASDAQ: AY
Recommendation: BUY



Company Data

Price.....	\$37.35
Market Cap.....	\$4.13B
EV/EBITDA.....	12.13x
Dividend Yield	4.59%
Price Target.....	\$44.80
Upside.....	19.90%

Investment Thesis

We recommend a buy on Atlantica Sustainable Infrastructure (AY); favorable economics and government regulation result in sector outperformance while AY’s asset makeup, relationships, and corporate structure create a competitive advantage. Upside may be realized through the introduction of new renewable regulations, acquisitions, and dividend increases. Outages, counterparty risk, and impeded development could lower this investment’s return. Through a dividend discount model, precedent transaction and comparable companies analysis we reached a price target of \$44.80, representing an upside of 19.9%

Two-Year Performance

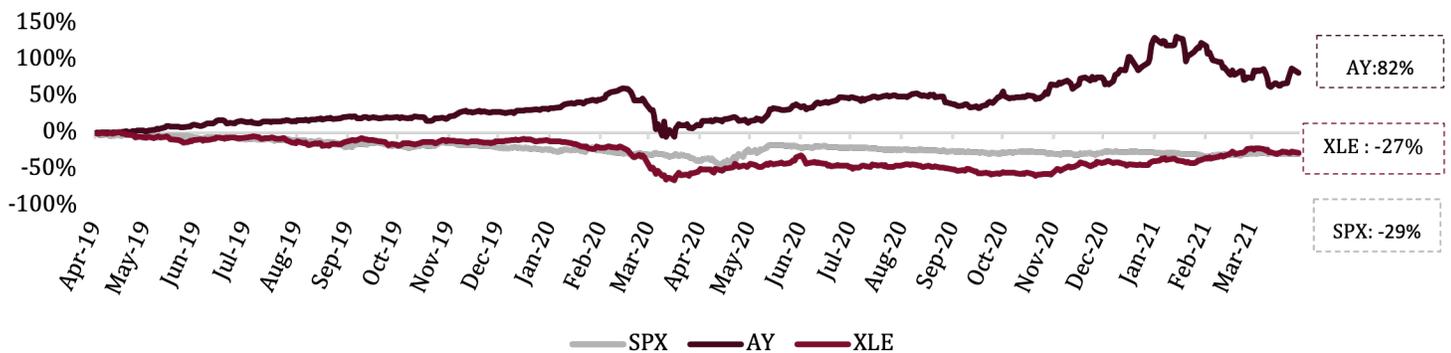


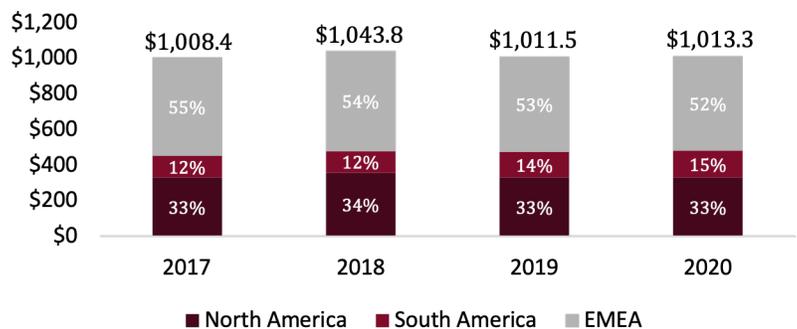
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Business Overview

Atlantica Sustainable Infrastructure (NASDAQ: AY) owns and manages renewable energy assets in addition to operations in storage, natural gas, water, and transmission infrastructure assets.

Fig 2: Revenue Breakdown by Geography



Atlantica’s portfolio consists of 1,591 MW of renewable energy generation capacity, of which 90% is solar, 343 MW of natural gas-fired power generation capacity, 1,166 miles of electric transmission lines, and 17.5 M cubic feet/day of water desalination capacity. The company has a large geographic footprint, owning and managing assets globally, with an intention to keep core operations in North American, South America, and Europe (Mostly Spain).

Revenue is primarily generated through the selling of electricity, electric transmission capacity, and water desalination capacity to electrical utilities and corporations. The capital-intensive nature of energy assets tends to result in high levels of debt for companies in the sector. That being, Atlantica maintains stable cash flows through the employment of long-term contracts. As of FY20, the weighted average contract life of assets is approximately 17 years, with a majority of assets having project financing in place. Project financing provides Atlantica with long term visibility into cash flows through offtake or power purchase agreements, in which the utilities or corporations buy all or a substantial portion of generated power. Debt incurred at the project level is hedged against fluctuating interest rates through long-term rate swaps and interest rate options, which, in exchange for a fee, protect against rising rates. As of YE 20, the company has approximately 92% of project debt and 100% of corporate debt fixed or hedged against rate changes. Debt at the project level is also self-amortized, meaning that periodic payments, consisting of both principal and interest, are made on a predetermined schedule. This results in automatic deleveraging, allowing the company to increase cash flows to equity at the project level with time. Additionally, in FY20, 55% of revenue derived from natural gas assets, electric transmission and water assets was in the form of availability payments, which are made irrespective of demand. For its non- solar and wind resources the company saw 100% availability levels across all three segments in 2020, translating to more stable cash flow generation.

Fig 3: Revenue Breakdown by Segment

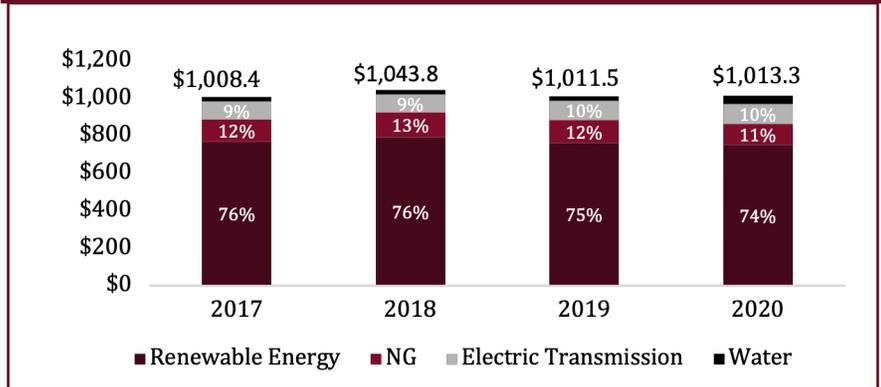


Fig 4: EBITDA Breakdown by Geography

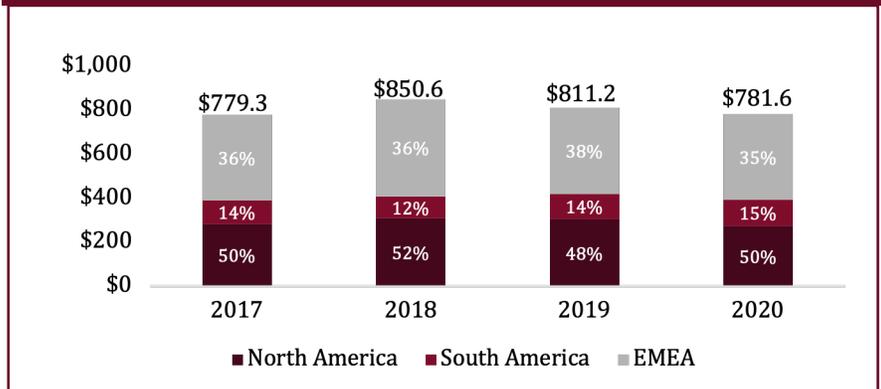
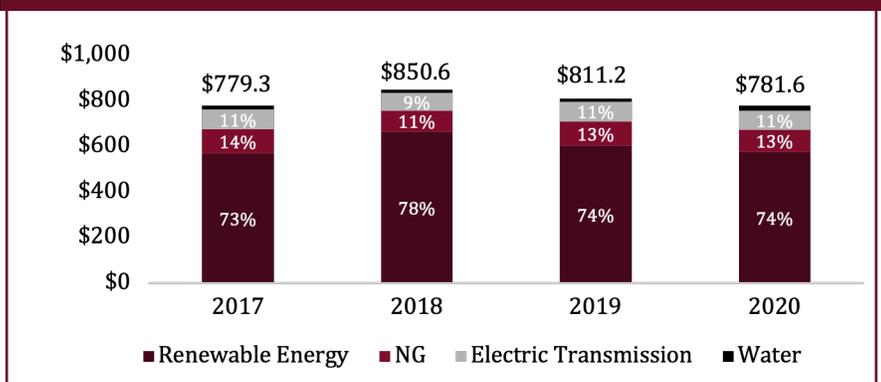


Fig 5: EBITDA Breakdown by Segment

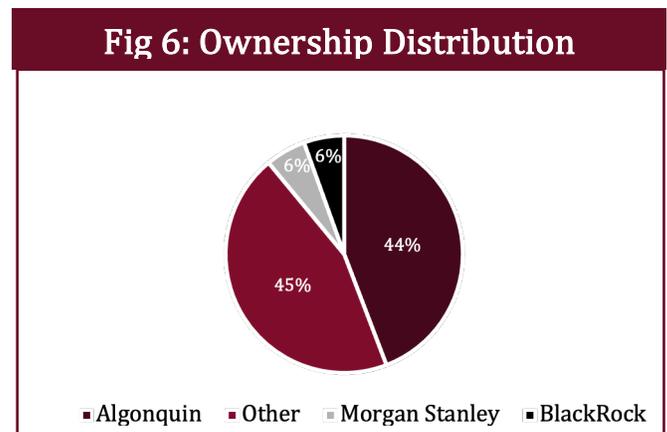


Atlantica’s contracted capacity and volume payments drive results. However, results may also be affected by volatility in demand and commodity prices, which could adversely affect customer's financial conditions. The company competes with peers based on asset location and for the acquisitions of new project developers, independent power producers and financial investors. AY’s competitive strengths are derived from organic growth opportunities of their existing portfolio, inorganic growth opportunities from leveraging their presence in operating geographies/sectors, as well as repowering capabilities within current assets.

Algonquin Summary

On March 5, 2018 Atlantica entered into a Right of First Offer (ROFO) agreement with Algonquin Power & Utilities Corp, which would become effective after Algonquin purchased a 25% stake in Atlantica. Algonquin is a diversified generation, transmission and distribution utility company. The ROFO agreement grants AY priority in purchasing any assets offered for sale outside the United States and Canada.

On March 9, 2018, Algonquin acquired a 25% stake in Atlantica from Abengoa with the option to acquire a remaining 16.5% stake, becoming the company’s largest shareholder (44.2%), starting the ROFO. In connection with this acquisition, Atlantica entered into a Shareholders Agreement with Algonquin. The Shareholders Agreement entails that Algonquin may increase its ownership in Atlantica to 48.5% without a change in corporate governance. Algonquin’s voting rights will be limited to 41.5%, with the additional shares replicating non-Algonquin’s shareholder’s vote, preventing Algonquin from acquiring control of Atlantica. Furthermore, if Algonquin ceases to hold 10% of total voting rights or if Atlantica lowers their dividend payment below 80% of the cash available for distribution, the Shareholders Agreement will terminate. Algonquin has progressively increased its stake in Atlantica. As a result, Algonquin is the owner of 48,962,925 ordinary shares of AY, representing ownership of 44.2% of outstanding ordinary shares.



In December 2019, Atlantica and Algonquin co-invested in Amherst Island, a 75 MW wind plant in Canada. Atlantica and Algonquin agreed to acquire La Sierpe, a 20 MW solar asset in Colombia, approximating \$20 million year end 2020, which is expected to be operational in mid 2021. Moving forward the company has agreed to possibly co-invest in an additional 30MW of solar capacity in Columbia, which would be built and developed by AAGES, Algonquin's international joint venture.

Stock Overview

AY has continuously outperformed the S&P over the last two years. The company saw a 35% decline in mid-February to March of 2020 attributable to market volatility as a result of the covid-19 pandemic. Furthermore, even with declines in natural gas and oil making renewables less competitive, the company has continued to outperform.

Atlantica ended fiscal year 2020 with \$201 million generated in cash available for distribution, reflecting a 5.5% year over year increase. Revenue stayed relatively stable from FY19 to FY20 with 3.1% in EBITDA attributable to higher operating costs associated with solar assets. EPS declined YoY from \$0.74 to \$0.17 due to a significant decline in net income, which can primarily be attributed to higher operating expenses.

In 2020, Atlantica saw a 69.3% and 31.5% increase in employee tax expenses, due the internationalization of operation and maintenance of U.S. solar assets and asset impairment, respectively. Additionally, the company has grown its dividend for the last 4 consecutive years with a current annual dividend payment of \$1.68 after making a \$0.01 increase in Q3 of 2020.

Going into 2021 the company has agreed to \$280 million in new equity investments, with assets in the renewable energy sector such as Coso, Calgary Direct Heating and Chile PV2. The Coso deal closed in March of 2021, reflecting the addition of a 135 MW renewable energy asset in California and the third largest geothermal energy plant in the United States to Atlantica's portfolio. Calgary Direct Heating represents Atlantica's first asset in the direct heating space. Calgary offers heating services to a diverse range of government, institutional and commercial customers in the city of Calgary in Canada. Chili PV2, a 55 MY solar PV plant, is the company's second investment through their renewable energy platform in Chile. The company is expected to grow both its asset base and dividends in the coming years with an expected 5-8% growth rate for CAFD. In March of 2021, the company received the lowest ESG risk rating in renewable power production indicating low exposure to ESG-related risks.

Industry Overview

Renewable energy currently lacks the large-scale portability and generation abilities of refined oil products, like gasoline or jet fuel, so the best analogues are natural gas and coal. As almost direct substitutes, the supply chains are extremely similar while the economics vary. Downstream, customers are utilities, serving end markets of businesses, governments, and consumers. The majority of sales come through power purchase agreements (PPAs), which are long-term contracts with agreed upon prices. Typically, in PPAs utilities agree to buy all power generated. Less common are merchant power plants, where electricity is sold on the spot market or through short-term contracts, providing more market exposure. Major demand drivers are both cyclical, such as economic activity and the weather, and secular. Secular demand growth is driven by climate concerns, regulation, and pricing vs substitutes. Over the next 20 years, the IEA expects renewable energy consumption to double. Due to nascent storage/battery technology, there is not really a midstream section of the renewables supply chain. Instead, electricity flows directly from upstream generation to utilities and their customers. Factors driving supply are quite similar to legacy sources: capital markets, demand/supply expectations, and regulation. Renewables inherently generate with little or no marginal cost, resulting in high profit margins once project debt is paid off. Due to renewable's deflationary nature, legacy energy sources are required

Fig 7: What is Project Finance?

Project Finance is a financing method used for capital intensive projects, primarily in the energy and utilities industries. The project sponsor, like AY, owns equity in an operating company focused on a specific project. The remaining financing comes as a loan from an investment company. Debt stays at the project company level, preventing sponsor overleveraging. The project sponsor's risk/return profile resembles that of a normal equity investment; they face limited liability in the event of bankruptcy but receive payment only after all obligations are satisfied (see Appendix: Project Finance). Project revenue and costs are contracted through power purchase agreements (PPAs), operating and maintenance agreements (O&M), and other agreements. The result is high visibility into steady future cash flows with little sponsor control. A project's financing costs and profitability depend on management experience, agreement terms, and environmental characteristics.

to maintain pricing power. Fortunately, the inability to control generation at times in order to match supply and demand mandates significant generation through legacy fuels, sustaining prices over our investment horizon.

Government Incentives

Governments have introduced various tax breaks and subsidies for renewable investment. The main countries AY operates in, The United States and Spain, offer particularly favorable regulatory regimes. In Spain, renewable generators have priority grid access and dispatch in the wholesale markets. They also receive remunerated payment for operation and investment, in addition to market price. There is a tax credit for solar thermals as well. Additionally, in the European Union, spending on renewables is not considered deficit spending, allowing them to maintain compliance with budget restrictions. The United States provides renewable energy incentives through the Renewable Electricity Production Tax Credit (PTC), the Investment Tax Credit (ITC), and the Modified Accelerated Cost-Recovery System (MACRS). PTC and ITC are specific credits while MACRS allows for accelerated depreciation. California, where AY's American assets are located, offers various incentives of its own, in addition to feed in tariffs and renewable portfolio standards requiring 50% of the state's electricity to come from renewable sources by 2030. In both countries, tax credits and incentives can be separated from the business and sold.

Reduction of incentives may adversely affect results from operations and limit growth prospects. Given the Biden Administration's commitment to carbon-neutral fuels, unfavorable policy action is not expected over our investment horizon. Similarly, the European Union's climate legislation is unlikely to adversely affect operations in the region.

Industry Valuations

Growth prospects, accommodative regulations, and favorable economics have been recognized by investors resulting in an expensive valuation for renewable companies, as shown in the increases to the indexes' valuation (Fig. 10). Price to cash flow was used due to lack of EV/EBITDA multiples. There's a high degree of variability to business models and markets for the composite companies, so any singular advantage/disadvantage or differentiating growth prospect is diversified out, indicating overall bullish sentiment. This sentiment makes it difficult to justify investing, given our alleged value strategy. However, we prefer to look at idiosyncratic and subsector relative value, determined by more specific factors, not

Fig 8: US Energy Consumption, by source (Q BTU)

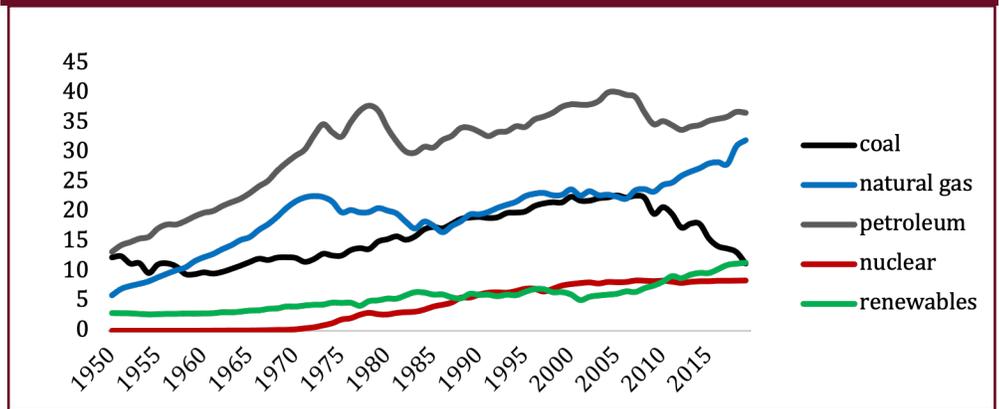
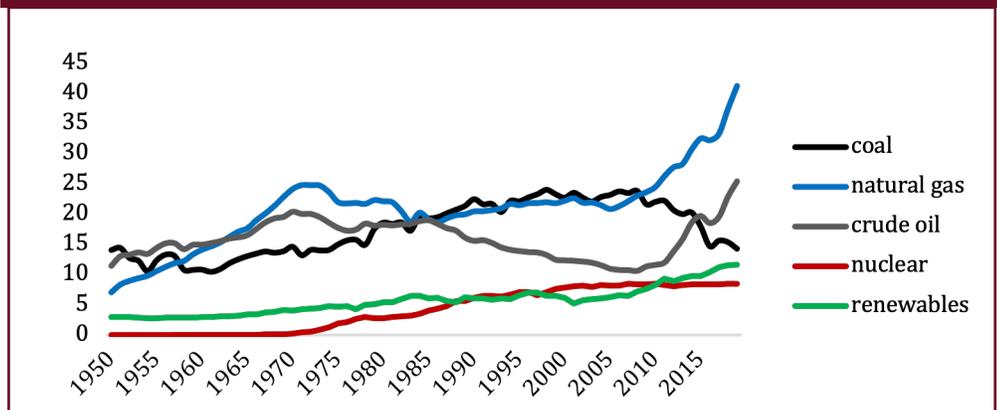


Fig 9: US Energy Production, by source (Q BTU)



factor value. In sectors like renewable energy, we look for reasonably priced, well-run companies to expose the portfolio to mega-trends.

Rationale: Shift to Zero-Carbon Fuels

Atlantica Sustainable Infrastructure generates revenue through selling electricity and electrical capacity, with renewable energy representing the largest segment of their portfolio. To date AY has 28 renewable assets that total 1,603 MW of renewable generating capacity, making

up 74% of the company’s revenue and adjusted EBITDA. Atlantica hopes to maintain over 80% of adjusted EBITDA generated from low-carbon assets including renewable energy, transportation and transmission infrastructure, district heating, and water. The company’s margin growth is largely driven by decreasing operating expenses and amortizing debt. Thus, long term tailwinds in renewable assets attributed to falling production costs, technological improvements, and increasingly favorable policy will positively benefit cash flow generation.

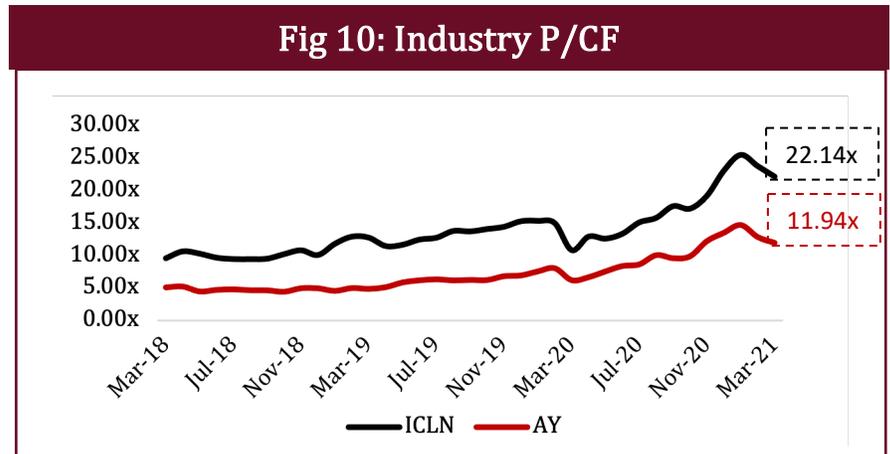
Renewable energy projects benefit from U.S. governmental incentives ranging from production tax credits to renewable portfolio standard (RPS) programs. Production tax credits provide a corporate tax credit of \$0.015/kWh for electricity generated from wind and \$0.013/kWh for solar generation. RPS programs set a minimum requirement for the share of electricity supply that comes from designated renewable energy sources within a certain time frame. Renewable assets also benefit from accelerated depreciation schedules, further decreasing developmental costs while creating demand through RPS programs. Atlantica’s portfolio currently consists of 104,00 kW of wind capacity and 1,431,000 kW of solar generating capacity, positioning it to benefit from positive federal and state incentives.

With all of Atlantica’s Spanish and U.S. solar assets (~85% of total solar) operating on concentrating solar thermal power (CSP) systems, they are equipped with energy storage, serving as a battery within the plant and allowing utilities to use solar-generated power at any time. CSP systems concentrate radiation from the sun to heat a liquid substance and drive an electric generator, similar to the way a magnifying glass can focus the sun’s energy and heat a surface. CSP systems directly generate alternating current (AC), which can be easily distributed. In contrast, photovoltaic (PV) solar panels use sunlight to generate direct electric current (DC), which must be converted to AC in order to be distributed by utilities. That being, CSP systems ease distribution and do not require inverters to convert DC to AC for distribution. Furthermore, CSP systems are able to store electricity for usage overnight while PV systems require external batteries for storage, resulting in electricity being not as easily stored within these systems. Thus, CSP energy storage capabilities allow for more flexibility in distribution capacity, improving reliability in large scale use.

Moreover, Photovoltaic modules are tested at a temperature of 25 degrees Celsius with increases in heat having the ability to reduce output efficiency by 10-25%. Thus, for a geographic region with temperatures higher than 25 degrees Celsius, alternative power generation sources have higher generating capacity. In Spain, where a majority of Atlantica’s solar assets are located, average temperatures range from 26 to 33 degrees Celsius between May and October. Regional temperatures are expected to increase by 2.2 degrees Celsius without additional mitigation. As CSP relies on mirror technology, it is more reliable in higher temperatures in comparison to photovoltaic modules. With temperatures in Spain exceeding peak operational temperatures of PV systems and as global warming contributes to rising average temperatures, CSP capacity is expected to outpace PV. Spain expects to add 60,000 MW of new renewable energy generation facilities by 2030. However, to date, diminishing PV costs coupled with shorter development times have resulted in larger photovoltaic installations. That being, it

Jake Gunning & Yesha Patel

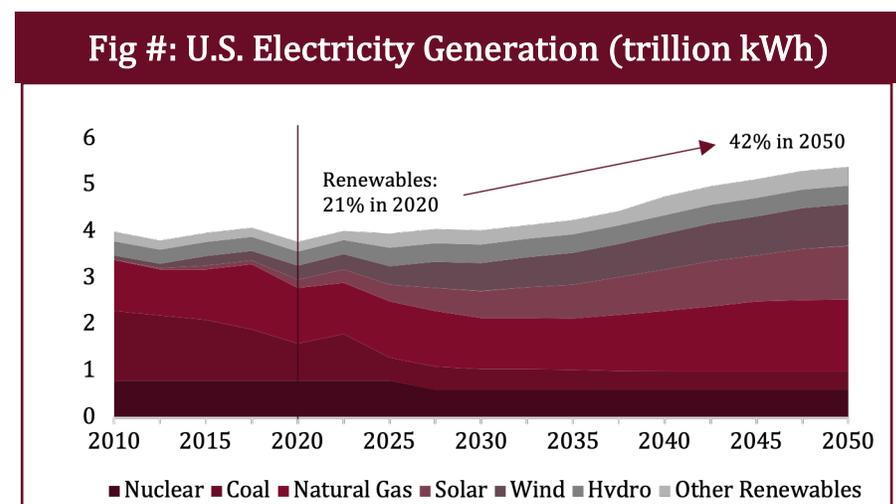
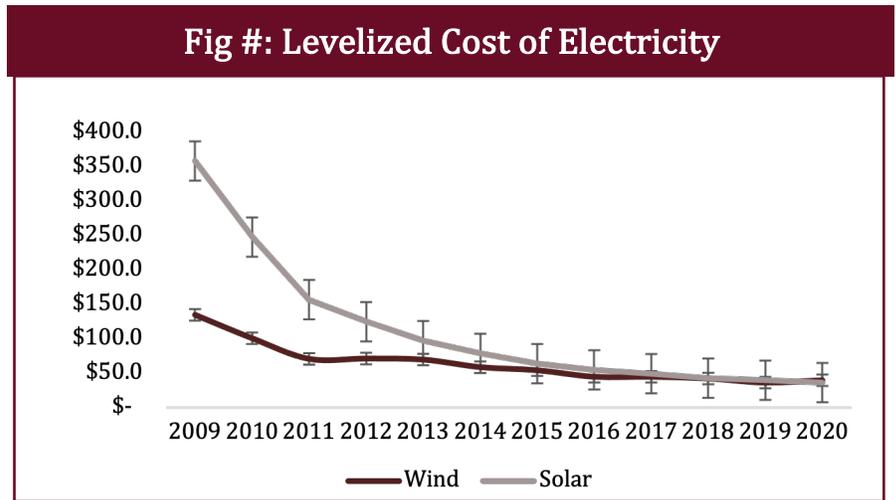
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is important to note that CSP operates more like a conventional power plant, generating electricity and distributing it when needed. As previously mentioned, PV is not easily dispatchable when sunlight is unavailable, resulting in a large-scale shift to renewable energy being more dependent on CSP. Atlantica is well positioned to benefit from further CapEx and OpEx declines in CSP as scalability increases, improving the bottom line. In 2010, CSP cost \$0.21 per Kwh, the Department of Energy was aiming for a reduction to \$0.098 per Kwh by 2018, which was achieved, and the expected cost per Kwh by 2030 is \$0.05. CSP has a high upfront cost, but operational costs have continued to decrease due to greater deployment volumes and R&D. Additionally, CSP systems are expected to see a 20% capital cost decrease by 2030 to 2050.

Hardware cost declines have also spanned across storage systems and other clean energy sources, such as wind, illustrating the role technological innovations play in mitigating large operating and maintenance costs for solar and wind assets. Declining costs position Atlantica to repower existing renewable assets as capacity growth in Spain is realized, allowing for increased energy production, grid service capabilities, and project reliability, without incurring large adverse impacts on operations. As capital costs continue to decline with technological improvements, the company can expect to see reductions in operating expenses coupled with increases in production volumes, positively affecting top and bottom-line growth.

To date, 78% of U.S. energy generation capacity is derived from fossil fuels. With 42% of power generation expected to come from renewable energy sources by 2050, reflecting a 26% decrease in reliance on fossil fuels, AY's renewable heavy portfolio is well positioned to benefit from the energy transition. This, coupled with Atlantica's project financing structure, allows the company to maintain long-term revenue visibility as government incentives are removed. Furthermore, lower capital costs associated with long term use of renewable assets will offset declines in tax incentives, ensuring renewables stay economically competitive with legacy fuels. Overall, declining production costs and low operating and maintenance costs associated with renewable assets allow Atlantica to capitalize on increases in demand for clean energy sources, while improving margins.



Rationale: Sizeable Growth Opportunities

Atlantica has been able to achieve organic growth through optimization of its existing portfolio and investments in expansions of current assets. This has contributed to the company steadily increasing its cash available for distribution from \$190.3 million in 2019 to \$200.7 million in 2020, reflecting a 5.5% increase.

The company’s operating cash flow for 2020 was \$438 million, reflecting a 20.5% rise from 2019 levels, mostly due to improvements in changes in working capital. Despite declines in energy demand, attributable to the Covid-19 pandemic, Atlantica’s strong cash flows allowed the company to spend \$300 million in equity investments in 2020. This coupled with an increase in CAFD, resulted in a 13.5% increase in the annual dividend, rising from \$1.48 in Q12019 to \$1.66 YE2020 (\$1.68 run rate), highlighting Atlantica’s ability to improve operations and increase shareholder returns.

Fig #: Cash Available for Distribution Growth

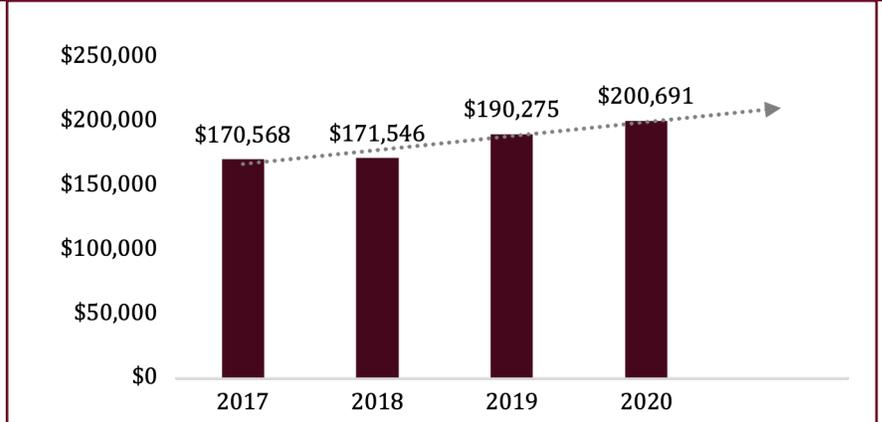
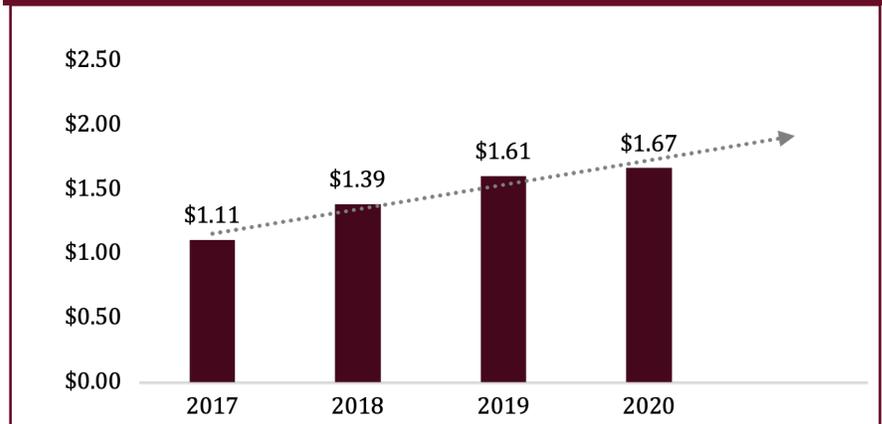


Fig #: Dividend Growth



As previously discussed, the company’s revenues are primarily contracted. AY has demonstrated strong growth in the past few years, incrementally building its portfolio of renewable assets, which will result in increases in revenue and visibility into future cash flows through PPAs. In fiscal 2020, AY invested in the creation of a renewable energy platform in Chile, through which it acquired a 55 MW solar plant in the region. The company also acquired tax equity ownership interest in Solana, a 250 MW solar plant in Arizona, allowing Atlantica to benefit from Solana’s tax incentives. AY invested an additional \$8 million in transmission line expansions.

Throughout 2021, Atlantica has continued investing in new and existing assets, adding \$280M in investment opportunities in Q1 alone. Adding Calgary Directing Heating, a direct heating asset in Canada, represented the company’s first investment within the segment. The company also co-invested with its largest shareholder, Algonquin, in La Sierpe, a 20 MW solar asset in Colombia. Additional investments were made in Coso, the third largest geothermal plant in the United States, and Chile PV 2, a second solar plant through their renewable energy platform in Chili. AY also spent agreed to spend \$50M in repowering existing assets. These assets play a pivotal role in AY’s ability to increase its CAFD through top-line growth. The company believes it will continue to grow its CAFD from \$200.7 million in 2020 to a guided midpoint of \$230 million in 2021. Additionally, Atlantica expects to invest \$300 million per year in equity investments, targeting a CAFD growth rate between 5% to 8%.

As detailed in rationale 1, ending 2020, renewable energy sources accounted for approximately 21% of U.S. electricity generation, outpacing coal, which accounted for approximately 19% of electricity generation. As renewables continue accounting for a greater percentage of the energy mix, Atlantica will be able to leverage its existing assets to increase visibility into future cash flows. Furthermore, as operating costs of renewables continue to decline, Atlantica will see direct improvements in bottom line growth. Declining production and operating costs also allow the company to achieve greater value from investments in repowering its existing renewable assets, directly improving operations. Thus, we expect AY to continue focusing on repowering and organic growth opportunities allowing the company to achieve its goal of a 5-8% increase in CAFD.

Atlantica has sustainable growth opportunities and is well positioned to benefit from macro tailwinds, which will drive long term CAFD growth. Since 2018, the company's dividend has grown at a 12% CAGR. The company's accretive acquisitions and repowering opportunities will allow Atlantica to improve its CAFD in the long run, in turn, increasing returns to shareholder

Rationale: Favorable Structure for Accretive Acquisitions

Several parts of Atlantica's structure contribute to a competitive advantage for inorganic growth. These advantages can be broken down into three stages: sourcing, taxes, and financing. First, the aforementioned Right of First Offer (ROFO) agreements with Algonquin, Abengoa, and several equity investors in projects where AY is the minority owner create a strong acquisition pipeline. For example, the ROFO with the Algonquin/Abengoa JV, AAGES, requires that prior to selling an asset they must offer it to AY and engage in a 60-day negotiation period. If no deal is reached, the asset cannot be sold for less than a certain amount (100% for US//Canada, 105% for elsewhere) of the last purchase price offered by AY for the next 30 months. This affectively allows AY to purchase certain assets cheaper than the rest of the market can. Additionally, Abengoa's parent company, Abengoa SA, recently declared bankruptcy in Spanish courts. They may be seeking to increase cash to pay debtors as a result and would have to offer assets to Atlantica first. Because it is an indiscriminate sale, prices may be cheaper than normal, and stakeholders won't want to wait 30 months. Atlantica is also leveraging its relationship with Algonquin to create JVs, such as AYES Canada, that provide further income through investments carried under the equity method.

As Algonquin is a regulated utility, its earnings are derived from investment in energy assets, not derived from customer demand. Utility companies often appear before a state agency to determine a revenue requirement, how much they must earn to have reasonable returns, which the agency ultimately decides. The revenue requirement is used to determine the rate customers will pay for commodities. That being, Algonquin has stated that assets resulting in high cash flows may be better held in Atlantica, incentivizing asset dropdowns to AY. These relationships establish an idiosyncratic growth pipeline, granting Atlantica opportunities to improve CAFD, positively impacting shareholder returns.

Second, AY has an especially favorable tax position against a favorable macro environment for the tax treatment of NOLs. As a UK resident company, they are exempt from distributions from subsidiaries. Of the comparable companies listed, only Arendals (AFK NO) enjoys a similar exemption. Project financing results in business lines being structured as project companies or subsidiaries, so the majority of income from those companies comes via dividend. Additionally, the company receives dividends from its JVs. This tax exemption translates into a higher margin for AY than its peer group. However, the company still faces taxes elsewhere. Fortunately, this is lowered by their large NOL position, which has led to the company to write, "based on our current portfolio of assets, which include renewable assets that benefit from an accelerated tax depreciation schedule... we do not expect to pay significant taxes in the upcoming years",

in the FY20 10-k. This is despite a moratorium on California NOL use (where most of their US assets are located) through 2022. Simultaneously, the CARES act extended the life of NOLs from 20 years to 30.

Finally, the company raises project debts at a lower rate than its US traded peer group (see comps). This is advantageous because the cost of capital is a major input in ROI. The debt is amortizing as well, meaning that as each year goes by, cash flows to equity in that specific project increase. Currently, 2 assets have completely amortized their debt and 5 more will in the next 8 years. As this debt amortizes, AY can refinance to pay for investments that increase uptake or return more cash to its shareholders. Over the past several months, US 10-year yields have increased 100 bps resulting in a drop in growth stocks due to risk-off trades and higher discount rates. It's uncertain whether the corresponding drop is overblown but the broader context of lower rates is favorable for AY.

Catalysts

1. Algonquin Dropdowns

The company is expected to see approximately 2-3% growth in CAFD attributable to its partnerships, one of which is Algonquin. With the regulatory environment favoring a transition to clean energy and the cost of operations and maintenance significantly declining, Algonquin may have high cash flow generating assets. If Atlantica acquires assets from Algonquin from their ROFO agreement, they will be able to expand generation capacity, directly benefiting top-line growth. Through long-term contracts, AY will also see an increase in projected cash flows.

2. Dividend Increase

Atlantica has been able to sustain dividend growth for the last couple years. The company saw the dividend grow at a CAGR of 6% from FY2019 to FY2020, rising from \$1.57 to \$1.66. Atlantica ended fiscal year 2019 and fiscal year 2020 with \$190.3 and \$200.7 million in CAFD, respectively. With a targeted range of \$220-\$240 million for fiscal year 2021, we may see a dividend increase in the coming year. Highlighting the company's ability to improve performance, driving the stock price up.

3. Favorable Regulation

The Biden Administration is in the midst of developing a climate finance plan, which is expected to promote the flow of capital towards renewable assets, incentivizing clean energy production. The climate finance plan is aiming to restrict project loans, insurance, and other forms of financing for fossil fuels. Additionally, with a goal to increase collaboration and innovation on renewable energy projects, we may see further cost reductions in renewable energy generation. This coupled with the capital gains from economic stimulus programs aimed at renewable energy will allow AY to increase generation capacity while lowering capital and operating costs. With a large portion of the company's solar assets located in Spain, favorable regulation from the country would further benefit the company. In June of 2020, Spain's government passed the Royal Decree-Law 23/2020, simplifying permit approvals for access and connection to the transmission and distribution grids for renewable energy sources. Additional climate legislation aimed at helping the country reach its target of adding 60,000 MW of new renewable energy generation facilities by 2030, would ease access to new assets for Atlantica, further boosting capacity and in turn, positively affecting revenue generation.

Risks

1. Renewable Energy Paradox

In existing power markets, the market clearing price for electricity is set to equal the marginal cost of production of the last unit sold. Thus, plants with marginal production costs that are lower than the market clearing price will be able to earn incremental revenues. Renewable technologies, which have almost zero marginal cost of production, are able to earn high profit margins when pricing power is maintained by legacy sources. However, this market design, when combined with the deployment of renewable technologies on a large scale, leads to a decline in wholesale electricity prices. As penetration of renewable sources increases, depressed electricity prices could hinder the company's ability to investment in capacity expansion and new renewable technologies, which can be capital intensive, adversely affecting margins.

2. Outages

Renewable energy generation is susceptible to adverse effects from extreme weather conditions. This can be illustrated by current events in Texas, where freezing rain and plunging temperatures froze wind turbines, contributing to shortages in electricity production. Furthermore, the intermittency of some renewable energy sources demonstrates a need for large amounts of energy storage technology to match demand during production shortfalls. A fast-paced transition into renewables could exacerbate the material risks associated with an all-renewable grid. In turn, discouraging investments in new projects and technologies, which would negatively affect Atlantica's renewable heavy portfolio. Furthermore, as the company relies on PPA's for cash flow visibility, outages and shortfalls from renewables could result in declining purchase volumes and contract rates over our investment horizon.

3. Development Complications

Atlantica's projects rely on technologically complex equipment and software with high initial costs. Increases in construction and operation expenses for specific projects or assets may negatively affect the cash flow generated for equity investors. Additionally, damages to equipment not covered by insurance, can curb production and raise operating expenses. This was seen in Atlantica's Solana asset, where storage availability was lower than expected in 2020 due to leaks identified in the storage system. The company plans on using the project's cash repair reserve account to fund repair. However, future developmental complications not covered by contractor guarantees or insurance could increase operational expenditures, lowering cash flow from a project level. In addition, as developmental complications can hinder production below levels targeted in off-take agreements, the company may also see additional negative impacts on revenue from unmatched production.

4. Counterparty Risk

Atlantica's portfolio consists of assets which sell electricity, transmission capacity, and desalination capacity under long-term contracts to utilities or other corporations. To date, 89% of current assets are contracted. That being, if counterparties to the company's off take agreements are unable to accept contracted generation volumes, or if agreements are terminated prior to their completion, the company would see adverse effects on revenue. Additionally, delayed payments from off-takers or deterioration in financial performance may result in price re-negotiations, which would negatively affect Atlantica's cash flow.

Comparable Companies

AY trades at a lower multiple than the peer group average, ex-major outliers, but has better metrics than peers. NEP has a lower multiple but also pays a lower dividend. Bloomberg WACC was included because although it's usually wrong, it's probably similarly wrong across the comp group. One possible explanation for AY's lower relative valuation is low coverage. Only three large banks cover the stock, but the analysts don't seem too concerned over the day to day. On the last several earnings calls, only once did more than two analysts ask questions. Alternatively, investors may be valuing their EBITDA lower due to their non-generation assets. We included international comps for context but acknowledge that the numbers may be unreliable due to international reporting.

Company	Ticker	Current Share Price	% of 52 Wk High	% of 52 Wk low	Market Cap	EV	EV/EBITDA	LTM ADJ. EBITDA	Divy Yield	BBERG WACC
Atlantica	AY	\$36.40	75%	169%	\$4,029	\$9,489	12.13x	\$782	4.59%	5.23%
Tier 1: US Listed										
Ellomay	ELLO	\$31.55	84%	213%	\$405	\$672	150.89x	\$4	0.00%	6.26%
Clearway	CWEN/A	26.17	76%	152%	5,530	13,474	12.45	1082	4.45%	5.16%
NextEra	NEP	72.34	82%	187%	5,490	14,166	11.22	1263	3.24%	6.93%
Brookfield	BEP	43.45	87%	191%	17,575	46,925	29.07	1614	3.00%	5.52%
Mean		\$43.38	82%	186%	\$7,250	\$18,809	17.58x	\$991	2.67%	5.97%
Median		\$37.50	83%	189%	\$5,510	\$13,820	12.45x	\$1,173	3.12%	5.89%
Tier 2: Foreign Listed										
Encavis	ECV GR	\$19.61	63%	203%	\$2,725	\$4,735	17.85x	\$265	1.56%	7.09%
Albioma	ABIO FP	50.13	81%	172%	1,592	2,696	11.07	244	0.82%	5.31%
Neoen	NEOEN FP	50.58	64%	171%	4,416	7,186	22.52	319	0.00%	4.35%
Averion	ARN IM	15.23	80%	311%	829	1,416	NA		1.55%	4.93%
Aventron	AVEN SW	14.96	95%	146%	654	1,047	NA		0.00%	1.20%
ERG	ERG IM	29.93	89%	169%	4,515	6,405	11.28	568	2.95%	6.26%
Falck	FKR IM	7.27	84%	164%	2,126	3,170	13.62	233	1.09%	7.88%
Terna	TENERGY GA	14.83	82%	194%	1,725	2,680	NA		2.76%	4.52%
Romande	HREN SW	1,351.50	94%	131%	1,541	1,470	NA		2.85%	3.09%
Arendals	AFK NO	31.67	93%	350%	1,778	1,689	NA		1.53%	8.87%
Mean		\$351.32	88%	210%	\$1,792	\$2,252	15.27x	\$233	2.06%	6.09%
Median		\$23.25	88%	179%	\$1,751	\$2,185	13.62x	\$233	2.15%	6.20%

Valuation

CAFD Build	12/31/19	12/31/20	12/31/21	12/31/22	12/31/23	12/31/24	12/31/25
Revenue	\$ 1,012	\$ 1,013	\$ 1,369	\$ 1,381	\$ 1,389	\$ 1,394	\$ 1,398
Operating Profit	501	373	531	569	585	607	627
<i>Operating Profit margin</i>	49%	37%	39%	41%	42%	44%	45%
DD&A	311	409	487	459	448	429	412
Adjusted EBITDA	811	782	1019	1028	1033	1037	1040
<i>Adjusted EBITDA margin</i>	80%	77%	74%	74%	74%	74%	74%
Principle amortization of indebtedness	(255)	(260)	(336)	(328)	(358)	(374)	(957)
Cash Available For Distribution	190	201	273	293	281	281	(221)
<i>Cash Available For Distribution y/y growth</i>	11%	5%	36%	7%	-4%	0%	-179%
DSO	101	102	103	103	103	103	103
CAFD/Share	\$1.88	\$1.97	\$2.64	\$2.83	\$2.72	\$2.71	(\$2.13)
Dividend	1.57	1.66	2.11	2.26	2.18	2.17	-1.71
<i>Dividend Payout Ratio</i>	83%	84%	80%	80%	80%	80%	80%
Present Value of Dividend			2.03	2.06	1.88	1.77	-1.32

Renewable generation companies have steady revenues and cash flows due to pre-negotiated PPAs and other agreements. In this model we attempted to strip out all factors that only occurred one time or were related to M&A. Due to this, revenue growth is typically inorganic, which is why it spikes in FY21. At the end of FY20, the company acquired a geothermal plant with 135 Mw of capacity. Since geothermal generation has a capacity factor around 75% and this increased the total Mw by 8%, the effects on total capacity factor (previous: 24%) and the top line were quite large. Operating margins improved due to lower depreciation as a percent of total revenue. After removing depreciation, margins were slightly worse than before, as seen in the Adjusted EBITDA margin. Large line items, such as depreciation, amortization of indebtedness, and interest payments were calculated according to future schedules and historical precedents in the 10-k.

The dividend payout ratio was lowered to 80% to acknowledge cash may be used for acquisitions and to be conservative. The negative CAFD/Share in 2025 is attributable to ~\$400m of corporate debt maturing in that year. Management will likely refinance the debt, as they have with almost every other issuance and mentioned for project debt with similar maturities, but we won't speculate on that. Acknowledging that they wouldn't be paying off ~\$400m in debt perpetually in the terminal period, we added it back in calculating our terminal value. Our WACC is significantly higher than Bloomberg's because they don't include project debt. The WACC seems low but renewable energy is a very predictable investment, so it carries a lower WACC. We chose a perpetuity growth rate of 3% to reflect that despite low economic growth, the renewable growth runway is massive. We have conviction in our predictions and our model but believe it should be used more for guidance than as an exact map due to its sensitivity to somewhat arbitrary inputs like perpetuity growth rate. Dependence on terminal value is also why our alternate scenarios are not included in this report; they create unrealistic swings in the share price despite little fundamental change. We prefer to use our sensitivity tables to understand the range of different outcomes.

WACC	
Beta	0.954
Risk Free Rate	1.7%
ERM	10.0%
Market Value of Equity	4,029
Weight of Equity	35.8%
Cost of Equity	9.6%
WA Interest rate	4.4%
Tax Rate	25.0%
Value of Debt	7,225
Weight of Debt	64.2%
Cost of Debt	3.3%
Calculated WACC	5.6%
Bloomberg WACC	3.9%

We supplemented our DDM with precedent transactions and comparable companies' valuations (See below and Pg. #15). Unfortunately for our attempts at being conservative we are in the renewable energy sector and nothing is conservative, except, on a relative basis, AY's valuation. We used the minimum of the average/median for precedent transactions and the midpoint of the Tier 1 comp group valuations to be conservative. Recognizing their higher value, possibly because market valuations can accommodate inorganic growth expectations, we weighted them minimally, with comps higher than precedent transactions for reasons any MEF JA can explain to you.

Precedent Transactions	
EBITDA	\$782
EV/EBITDA	15.85x
Enterprise Value	\$12,391
Net Debt	\$5,363
DSO	103
Equity Value Per Share	\$67.97
<i>Implied Upside</i>	86.7%

Comps	
EBITDA	\$782
EV/EBITDA	15.02x
Enterprise Value	\$11,743
Net Debt	\$5,363
DSO	103
Equity Value Per Share	\$61.71
<i>Implied Upside</i>	69.5%

Dividend Discount Model	
Terminal Value of Dividend	47.64
Perpetuity Growth Rate	3%
Sum of PV of Dividends/Share	6.42
Present value of terminal value	36.84
Equity Value Per Share	\$43.26
<i>Implied Upside</i>	18.8%

Blended Price Target		
Method	Weight	Valuation
Precedent Transactions	3%	\$67.97
Comps	5%	\$61.71
Dividend Discount Model	93%	\$43.26
Equity Value Per Share		\$44.80
<i>Implied Upside</i>		23.1%

Precedent Transactions

Date	Transaction		Buyers	Valuation		Metrics	
	Target	Value		EV/MW	EV/EBITDA	MW	EBITDA
3/7/17	TERP	\$5,319.16	BEP	\$5.59	0.00x	952Mw	\$296
11/4/19	PEGI	5,948.94	Canada Pension Plan	1.35	1.08	4400	287
8/16/11	EEN FP	5,491.23	EDF FP	0.76	2.26	7190	359
3/17/20	TERP	1,837.76	BEP	0.44	0.00	4200	231
	Average	\$4,649.27		\$1.11	15.85x	4186Mw	\$293
	Median	\$5,405.20		\$1.06	0.54x	4300Mw	\$292

Sensitivity Tables

		Dividend Payout Ratio				
		76.0%	78.0%	80.0%	82.0%	84.0%
WACC	4.6%	\$69.12	\$69.29	\$69.45	\$69.61	\$69.78
	5.1%	\$52.88	\$53.04	\$53.20	\$53.37	\$53.53
	5.6%	\$42.94	\$43.10	\$43.26	\$43.42	\$43.58
	6.1%	\$36.23	\$36.39	\$36.55	\$36.70	\$36.86
	6.6%	\$31.39	\$31.55	\$31.71	\$31.87	\$32.03

		Dividend Payout Ratio				
		76.0%	78.0%	80.0%	82.0%	84.0%
WACC	4.6%	90%	90%	91%	91%	92%
	5.1%	45%	46%	46%	47%	47%
	5.6%	18%	18%	19%	19%	20%
	6.1%	0%	0%	0%	1%	1%
	7.1%	-24%	-23%	-23%	-22%	-22%

		Perpetuity Growth Rate				
		2.5%	2.8%	3.0%	3.3%	3.5%
WACC	4.6%	\$54.32	\$60.85	\$69.45	\$81.28	\$98.59
	5.1%	\$44.15	\$48.19	\$53.20	\$59.59	\$67.99
	5.6%	\$37.28	\$40.00	\$43.26	\$47.21	\$52.11
	6.1%	\$32.33	\$34.28	\$36.55	\$39.21	\$42.39
	6.6%	\$28.60	\$30.05	\$31.71	\$33.62	\$35.83

		Perpetuity Growth Rate				
		2.5%	2.8%	3.0%	3.3%	3.5%
WACC	4.6%	49%	67%	91%	123%	171%
	5.1%	21%	32%	46%	64%	87%
	5.6%	2%	10%	19%	30%	43%
	6.1%	-11%	-6%	0%	8%	16%
	7.1%	-29%	-26%	-23%	-19%	-15%

Appendix: ESG

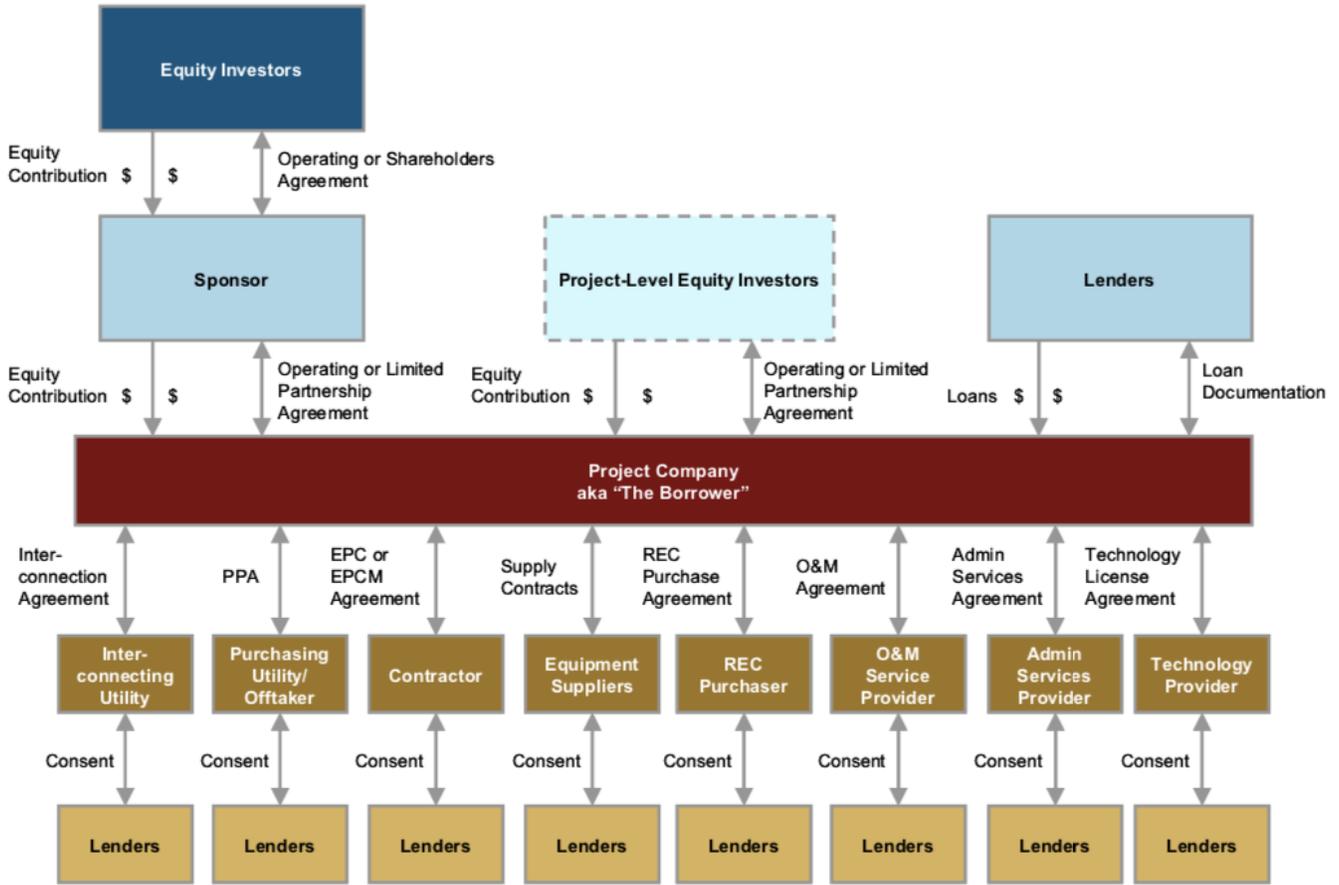
AY acknowledges the shifting paradigm in energy markets and has emphasized their goals to focus on ESG value-added initiatives. In Sustainalytics' ESG Risk Ratings, Atlantica was ranked number one globally within renewable power and utilities. The company has set a target to maintain at least 80% of Adjusted EBITDA generated by low carbon footprint assets. In fiscal year 2020, 87.3% of the company's adjusted EBITDA corresponded to low carbon footprint assets. The company's ESG focuses include:

- **Health and Safety:** 2020 was recognized as the sixth consecutive year AY improved its key health and safety indicators, achieving a Lost Time Injury Rate of 0.3 and a Total-Record Incident Rate of 1.0.
- **Climate Change and GHG Emissions:** the company maintained low greenhouse gas emissions, averaging 0.17 tons of carbon dioxide per megawatt hour. The company improved on tons of carbon dioxide avoided, reaching 5.4 million tons in 2020, a 0.7 million metric ton improvement from 2019 levels.
- **Diversity and Community Engagement:** AY actively supported local communities during covid-19 related lockdowns, donating personal protective equipment. The company issued a Board Diversity Policy, which aims to appoint board members with different sets of skills, professional and industry backgrounds, geographical experience and expertise, gender and ethnicity. Atlantica was also included in the 2021 Bloomberg Gender-Equality Index (GEI). The GEI brings transparency to gender-related practices and policies at publicly listed companies increasing the breadth of ESG data available to investors.
- **Corporate Governance:** Atlantica has one class of shares, and the majority of the company's directors are independent. Additionally, all the board committees are formed exclusively by independent directors.

Atlantica has improved its ESG ratings, which highlight that the company has fewer financial risks associated with environmental or other practices. With an emphasis on climate and pollution specifically within the energy sector, a strong ESG rating highlights that the company is in-line with industry trends.

Appendix: Project Finance

Typical Project Finance Structure



Typical Project Finance Waterfall

