

# Welcome to your CDP Climate Change Questionnaire 2021

## C0. Introduction

### C0.1

#### **(C0.1) Give a general description and introduction to your organization.**

Atlantica is a sustainable infrastructure company with the majority of its activities in renewable energy. In 2020, our renewable sector represented approximately 74% of our revenue, with solar energy representing approximately 70%. We complement our renewable assets portfolio with storage, efficient natural gas and transmission infrastructure assets, as enablers of the transition towards a clean energy mix. We are also present in water infrastructure assets, a sector at the core of sustainable development. Our purpose is to support the transition towards a more sustainable world by investing in and managing sustainable infrastructure, while creating long-term value for our investors and the rest of our stakeholders.

We currently own and manage operating facilities in North America (United States, Canada and Mexico), South America (Peru, Chile, and Uruguay) and EMEA (Spain, Algeria and South Africa). We intend to expand our portfolio, while maintaining North and South America and Europe as our core geographies.

Atlantica is a U.K. company listed on Nasdaq Global Select Market under the ticker symbol "AY". In 2020 our assets generated a revenue of \$1,013 million and an adjusted EBITDA including unconsolidated affiliates of \$796 million. Atlantica had 456 employees as of December 31, 2020, 27% of which were women.

In 2020, our activities allowed us to avoid over 5 million tons of CO<sub>2</sub> emissions compared with a 100% fossil fuel-based generation plant. In addition, following a thorough analysis, the Board of Directors approved a new ambitious GHG emission target, setting out to achieve a 70% reduction in Atlantica's emission rate per unit of energy generated by 2035 vs. the 2020 base year. As part of our commitment to sustainability, we also implemented a new GHG emission offset mechanism. Furthermore, the Board is also committed to maintaining over 80% of our adjusted EBITDA, including unconsolidated affiliates, from low-carbon footprint assets such as renewable energy, storage, transmission infrastructure and water assets.

As of the date of this report Atlantica owns or has interests in 34 assets, comprising 2,018 MW of aggregate renewable energy installed generation capacity (of which ~71% is solar), 398 MW

of efficient natural gas-fired power generation capacity, 1,166 miles of electric transmission lines and 17.5 M ft3 per day of water desalination. All of our assets have contracted revenue (regulated revenue in the case of our assets in Spain and Chile TL3) with long-term off-takers that collectively have a weighted average remaining contract life of ~16 years as of June 2021.

According to Bloomberg New Energy Finance 2020, ~68% of the world’s power generation by 2050 is expected to come from renewable energy sources. Global installed capacity is expected to shift from 56% fossil fuels today to approximately two-thirds renewables by 2050. To do so, regions will need to complement investments in renewable energy with investments in storage, efficient natural gas and in transmission networks. In addition, we have confidence that water is going to be the next frontier in a transition towards a more sustainable world. New sources of water are needed worldwide, and water desalination and water transportation infrastructure should help make that possible.

We intend to grow our business by investing in sustainable infrastructure, with a focus on high-quality, long-term agreements. We believe that we can create more value over time by investing mostly in assets that avoid GHG emissions, including energy efficiency and renewable energy assets. We intend to leverage our growth strategy on favorable trends in clean power generation, transmission and water sectors globally, including energy scarcity.

Atlantica complies with the 2008 U.K. Climate Change Act on GHG reporting, with the Commission Regulation (EU) No 601/2012, and with the GHG Protocol on GHG quantification.

Atlantica joined the United Nations Global Compact (UNGC) initiative in 2018 and has formally adopted the UNGC Ten Principles. Atlantica is committed to aligning its actions to 7 of the 17 SDG. The core goals for Atlantica include SDG13 (Climate Action), where we believe we can have a significant impact. We are determined to have the UNGC and its principles an integral part of our strategy, culture and day-to-day operations.

In the last year we have continued our good progress on our ESG commitments. This has been corroborated by Sustainalytics’ ESG Risk Rating assessment. In early 2021, Sustainalytics rated Atlantica in the ESG Risk Rating assessment as the top company within both the renewable power production and the broader utility industry, and in the top 1% in the global rating universe. January 2021 also saw us included in the Global 100 Most Sustainable Companies Index by Corporate Knights, where we were ranked 12th (2nd in the power sector).

Lastly, we have started to voluntarily report our activities based on the European Union taxonomy.

## C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years
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Reporting year	January 1, 2020	December 31, 2020	No
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## C0.3

**(C0.3) Select the countries/areas for which you will be supplying data.**

- Algeria
- Canada
- Chile
- Mexico
- Peru
- South Africa
- Spain
- United States of America
- Uruguay

## C0.4

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

- USD

## C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

- Operational control

## C-EU0.7

**(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.**

Row 1

### Electric utilities value chain

- Electricity generation
- Transmission

### Other divisions

- Battery storage

## C1. Governance

### C1.1

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

#### C1.1a

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	<p>The CEO, in his executive role and as Director of the Board has a leading position and responsibility over climate-related issues. The Board has the highest responsibility for climate-related issues, as it is the ultimate decision making body.</p> <p>Atlantica's CEO is responsible for formulating and submitting to the Board's approval climate-related initiatives, targets, policies and actions. For example, the CEO, as part of his responsibilities, has proposed to the Board and the Board has approved climate change related targets, including: (1) reducing Atlantica's emission rate per unit of energy generated by 70% by 2035 vs. the 2020 base, and (2) maintaining over 80% of adjusted EBITDA including unconsolidated affiliates generated from low-carbon footprint assets such as renewable energy, storage, transmission infrastructure and water assets.</p> <p>Climate-related issues are also integrated in the growth strategy of Atlantica. Investment opportunities are presented to the Board after approval by our Investment Committee, which includes the CEO. When evaluating investments, the CEO and the Board consider the impact of such investments on our climate change related targets. The achievement of these targets is reviewed by top management in our ESG Committee, which is held once a month. In this regard, in 2021 we have updated the carbon price to \$20-\$35 per ton of CO2 when evaluating investing activities. E.g. We have rejected investment opportunities in North America due to the negative impact they had on our climate change related targets.</p> <p>In August, 2020, we closed the acquisition of the tax equity investor equity interest in Solana, a 280 MW solar plant in Arizona, in which we already owned a controlling equity interest.</p> <p>In April 2020 we invested in the creation of a renewable energy platform in Chile, together with financial partners, in which we own a ~35% stake and have a</p>

	<p>strategic investor role. The first investment was the acquisition of a 55 MW solar PV plant. In January 2021 we also closed our second investment through the platform with the acquisition of a 40 MW PV plant.</p> <p>In December 2020 we reached an agreement with Algonquin to acquire La Sierpe, a 20 MW solar asset in Colombia. Also in December 2020, we reached an agreement to acquire Coso, a 135 MW geothermal plant in California. This acquisition was closed in April 2021.</p>
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## C1.1b

**(C1.1b) Provide further details on the board’s oversight of climate-related issues.**

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues Other, please specify	<p>ESG matters are included in the agenda of every Board meeting while climate related-issues are included in some Board meeting agendas. The Board of Directors of Atlantica is responsible for the oversight of climate-related risks and opportunities.</p> <p>Following a thorough analysis, the Board of Directors approved a new ambitious GHG emissions reduction target, consisting of reducing Atlantica’s emission rate per unit of energy generated by 70% by 2035 vs. the 2020 year base. This is a particularly aggressive target for a company like Atlantica, where renewable energy production – an activity which already has a very low rate of emissions per unit of energy produced and is well below the average power production activities in traditional utilities – accounts for approximately 75% of our business. As part of our commitment to sustainability, the Board also approved a new GHG emission offset mechanism. In addition, the Board is committed to maintaining over 80% of our adjusted EBITDA, including unconsolidated affiliates, continues to be generated from low-carbon footprint assets such as renewable energy, storage, transmission infrastructure and water assets. The achievement of these targets is reviewed by top management in our ESG Committee, which is held once a month.</p> <p>In addition, when the Board of Directors evaluates a</p>

	<p>Reviewing ESG and climate change related policies.</p>	<p>potential investment, emissions and environmental factors and risks are considered in the due diligence and decision making process.</p> <p>Particularly, the CEO, in his executive role and as Director of the Board, has a leading position and responsibility over climate-related issues, including submitting the following actions for Board approval:</p> <ul style="list-style-type: none"> <li>- raising sustainability and ESG policies and targets for approval, including those related to climate change,</li> <li>- setting goals for climate-related matters and submitting those goals to the board for approval,</li> <li>- monitoring and overseeing progress in line with established objectives,</li> <li>- recommending the implementation of best practice initiatives in relation to ESG and climate change,</li> <li>- regularly reviewing ESG and climate related risks and opportunities and informing the Board,</li> <li>- leading the preparation of the ESG Report for approval by the Board on an annual basis.</li> </ul>
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## C1.2

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify Geographic VPs	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify Head of Operations	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other, please specify Head of Internal Audit and Risk	Assessing climate-related risks and opportunities	More frequently than quarterly
Other, please specify Head of ESG	Assessing climate-related risks and opportunities	More frequently than quarterly
Other, please specify ESG Committee	Assessing climate-related risks and opportunities	More frequently than quarterly

Other, please specify Investment Committee	Assessing climate-related risks and opportunities	More frequently than quarterly
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## C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

**Where in the organization this position lies:**

The Board of Directors is the highest level of responsibility for climate change since is the ultimate decision-making body. The Board oversees the implementation of ESG and climate change related initiatives and prioritizes internal resources committed to the advancement of ESG objectives. The Board receives updates on ESG (for example, occupational health and safety) on every board meeting and at least semi-annually on the progress on climate-related issues and on the main environmental indicators (GHG emissions, water, and waste). When evaluating investment opportunities, the Board supervises the potential impacts on our climate change related targets. The audit committee assists the Board in fulfilling its oversight responsibilities concerning the management of risks, related frameworks, controls and processes, including potential ESG factors that could be risk drivers. The nominating and corporate governance committee assists the Board in fulfilling its oversight responsibilities concerning compliance issues, including ESG-related policy approvals.

Atlantica has integrated ESG and climate change into its businesses via policy making, ESG planning, risk management, KPI setting and tracking. At the management level, we have assembled committees with different responsibilities based on Atlantica’s priorities. These committees are led by senior management members with diverse perspectives and experiences to efficiently and effectively address ESG related issues, risks and opportunities.

**Responsibilities of each position and/or committee with regard to the assessment and monitoring of climate-related issues include:**

- The CEO, in his executive role and as Director of the Board, manages, supervises and has a leading position and responsibility over climate-related issues, including submitting the following actions for Board approval: (1) raising sustainability and ESG policies and targets for approval, including those related to climate change, (2) setting goals for climate-related issues, submitting those goals to the board for approval, and monitoring and overseeing progress in line with such objectives, (3) recommending the implementation of climate change best practice initiatives, (4) regularly reviewing climate related risks and opportunities, (5) leading the preparation and the Board’s annual approval of the ESG Report.
- Geographic VPs: Hold full responsibility over assets they manage, including ESG and climate change related issues such as acute, physical and/or regulatory risks.
- The Head of Operations: Responsible for all environmental and operations aspects across assets, including improving asset performance, KPI monitoring regular environmental and operational audits, analyzing measures to reduce environmental impacts, and implementing best practices.



- The Head of Internal Audit and Risk participates in identifying and monitoring climate change risks with the Geographic VPs. In addition, he prepares and agrees with VPs and the CEO the risk map including climate change risks. The Head of Internal Audit and Risk reports to the Audit Committee.
- The Head of ESG: Identifies sustainability best practices, proposes actions to the CEO, geographic VPs and ESG Committee and monitors the implementation of approved proposals.

We have an ESG Committee which meets monthly. The main functions of this committee are:

- Provide visibility on ESG, climate change and operation and maintenance issues enabling, prioritization and immediate action (if deemed necessary).
- Set targets and measures for environmental protection and GHG emission reductions.
- Review key health and safety and environmental KPIs as well as best practices, lessons learnt and implementation progress in relation to audit recommendations.
- Set strategy and actions on social investments in local communities and discuss client relations issues (if deemed necessary).

The ESG Committee members include the CEO, Geographic VPs, the Head of Operations and the Head of ESG.

We have an Investment Committee which meets twice a month and on an as-needed basis. The main climate change related functions of this committee include analyzing potential growth opportunities considering: (1) impacts on our climate-related commitments and targets, (2) ESG and climate change risks in due diligence analysis, and (3) carbon pricing to evaluate investment opportunities of \$20-\$35 per ton of CO2. The CEO leads investment committees. The CFO, the Legal Counsel, the Head of Operations, the Head of Internal Audit and Risk, and the VP Strategy & Corporate Development are also permanent committee members.

Additional detailed information on the highest management-level positions and committees with responsibility for climate-related issues is included in the Sustainability Governance section of our 2020 ESG Report, publicly available at [https://www.atlantica.com/wp-content/uploads/documents/2020\\_ESG\\_Report.pdf](https://www.atlantica.com/wp-content/uploads/documents/2020_ESG_Report.pdf) (pages 96 to 99).

## C1.3

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Approximately 71% of our key management and 29% of our management have a variable compensation linked to ESG



	<p>performance. This includes health and safety, compliance, and environment matters (including climate-related matters). Part of the short-term variable remuneration of the CEO, Geographic VPs and VP Strategy and Head of Corporate Development have environmental-related targets as part of their variable compensation. E.g., part of the CEO's short-term variable remuneration is linked to closing accretive investments and these investments have to be aligned with our climate-related targets. Other monetary rewards include the identification and/or implementation of measures to position Atlantica as a leader in climate change. This includes reducing the environmental impact of our operations, neutralizing GHG emissions or assessing the potential implementation of SBT. Overall, ~57% of our employees with variable remuneration have targets linked to ESG (including climate related matters).</p>
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### C1.3a

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	Atlantica has a target to reduce its emission rate per unit of energy generated by 70% by 2035 vs. the 2020-year base. In addition, the company targets to have over 80% of its adjusted EBITDA including unconsolidated affiliates generated from low-carbon footprint assets including renewable energy, storage, transmission infrastructure and water assets. These targets influence specific performance indicators that are tied to executive remuneration. For example, part of the short-term variable remuneration of the CEO is linked to closing accretive investments and these investments have to be aligned with the aforementioned climate-related targets.
Other C-Suite Officer	Monetary reward	Emissions reduction target	At Atlantica, asset managers oversee day-to-day activities of each of our assets and report to three geographic VPs (C-Suite Officers), who have full responsibility and accountability for the assets they manage. VPs have the

			<p>opportunity to address ESG issues, including climate change related initiatives and issues when deemed necessary in the ESG Committees. ESG management includes implementing a zero-accident culture, minimizing environmental impacts, and overall asset risk identification and mitigation (including climate change matters). In addition, part of the short-term variable remuneration is linked to closing accretive investments and these investments have to be aligned with our climate-related targets.</p>
Environment/Sustainability manager	Monetary reward	<p>Emissions reduction project                      Emissions reduction target                      Efficiency project                      Behavior change related indicator</p>	<p>We have monetary rewards for implementing initiatives that reduce the environmental impact of our operations including initiatives to reduce GHG emissions.</p>
Other, please specify Head of ESG	Monetary reward	<p>Emissions reduction target                      Behavior change related indicator</p>	<p>We have monetary rewards for identifying and/or implementing measures to position Atlantica as a leader in climate change. Examples of variable compensation include neutralizing GHG emissions, assessing the potential implementation of Science Based Targets, maintaining high ESG-related ratings, improving ESG reporting, etc.</p>
Other C-Suite Officer	Monetary reward	<p>Emissions reduction target</p>	<p>Atlantica has a target to reduce its emission rate per unit of energy generated by 70% by 2035 vs. the 2020-year base. In addition, the company targets to have over 80% of its adjusted EBITDA including unconsolidated affiliates generated from low-carbon footprint assets including renewable energy, storage, transmission infrastructure and water assets. These</p>

			targets influence specific performance indicators that are tied to executive remuneration. For example, part of the short-term variable remuneration of the VP of Strategy and Corporate Development is linked to closing accretive investments and these investments have to be aligned with the aforementioned climate-related targets.
Other, please specify Head of Operations, Health and Safety, Environment and Quality	Monetary reward	Efficiency project	Part of the short-term variable remuneration of the Head of Operations, Health and Safety, Environment and Quality is linked to improving processes, tools and systems in assets (asset efficiency improvements).

## C2. Risks and opportunities

### C2.1

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

#### C2.1a

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	1	2	Being a renewable energy company, environmental matters are an integral part of our strategy and operations, hence we consider them on the same time horizons as any other strategic and capital planning. We consider 1-2 years as a short-term horizon in our planning.
Medium-term	2	5	We consider 2-5 years as a medium-term horizon in our planning.
Long-term	5	30	We consider a long-term horizon periods over 5 years.

#### C2.1b

**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

Atlantica defines a substantive impact as a real and measurable risk that has a considerable or relatively significant effect at the corporate or asset level. This may include operational, financial or strategic (including climate-related) issues that may undermine the entire business or part of the business. At Atlantica we employ a risk map which adopts a multidisciplinary approach to identify risks in different areas, assigning probability distributions and measuring economic impacts.

Cash Available for Distribution (CAFD) is one of Atlantica's key metrics. CAFD is defined as cash distributions received by Atlantica Sustainable Infrastructure plc from its subsidiaries minus cash expenses of the Company, including debt service and general and administrative expenses. Most of our investors consider our CAFD metric to measure Atlantica's performance.

CAFD pre-corporate debt service refers to cash distributions received by Atlantica Sustainable Infrastructure plc from its subsidiaries after general and administrative expenses.

We categorize risks depending on their potential impact on CAFD pre-corporate debt service and on the net present value of the company:

- (1) Extreme Risk >20%
- (2) Major Risk 10-20%,
- (3) Moderate Risk 5-10%
- (4) Minor Risk 1-5%
- (5) Insignificant Risk <1%.

When a risk is considered to have an Extreme or Major impact on our CAFD pre-corporate debt service or on our net present value we consider this risk to have a substantive financial or strategic impact on our business.

A substantive impact usually affects at least one of these indicators:

- Cash Available for Distribution.
- Revenue.
- Adjusted EBITDA including unconsolidated affiliates.
- Operational performance of our assets.
- Growth strategy.
- Ability to raise additional capital or ability to repay existing debt.
- Reputation.

We believe that key climate-related substantive impacts could be mainly driven by: (i) acute or chronic physical risks, (ii) current and emerging regulation, (iii) legal risks, (iv) investments in new technologies or, (v) market (global-trend) opportunities.

## C2.2

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

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### **Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

### **Risk management process**

Integrated into multi-disciplinary company-wide risk management process

### **Frequency of assessment**

More than once a year

### **Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

### **Description of process**

Climate change risk management is integrated in the company's general risk management strategy and is promoted by its Board of Directors. The Audit Committee (at Board level) supports the Board by performing regular reviews on its risks, related frameworks, controls and processes, including potential ESG and climate change factors as risk drivers.

We have comprehensive Enterprise Risk Management (ERM) across all our geographies that involves the identification, assessment, mitigation and communication of risks to achieve our strategic, financial and operational objectives.

We have a risk map that adopts a multidisciplinary approach to identify risks in different areas, assigning probability distributions and measuring economic impact in order to propose action plans to mitigate risks. Once the information is compiled, key conclusions are outlined in a report. This report includes the risk assessment, mitigation strategies, deadlines and responsible parties.

Description of the process: (1) Geographic VPs, asset managers or local compliance managers and Corporate responsible (e.g. environmental, operations, legal or tax managers) identify risks based on their day-to-day activities, regulation, etc. and report them to the Head of Internal Audit and Risk (hereinafter Head of Risk). This is performed at least on a quarterly basis. (2) Regular meetings are held between the aforementioned departments to clarify potential questions. (3) The internal risk department completes Atlantica's risk map on a quarterly basis. (4) Once the risk map is completed, conclusions are shared with geographic VPs and presented to the management committee on a quarterly basis. (5) Key risks are also presented to the Audit Committee on a quarterly basis along with mitigation actions.

To mitigate risks, responsibility is assigned to each risk depending on its nature,

likelihood, potential financial impact and the time horizon covered (short, medium or long-term). Potential decisions to manage risks include: i) internal management and/or ii) transfer through insurance policies.

Climate risks generally entail acute and/or chronic physical risks and regulatory risks.

Atlantica's risk procedures define 5-levels of risks as a function of its potential substantive financial impact and its likelihood.

A) In terms of financial impact: (1) Extreme >20%, (2) Major 10-20%, (3) Moderate 5-10%, (4) Minor 1-5%, (5) Insignificant <1%.

B) In terms of likelihood: (1) Almost certain >95%, (2) Likely 50-95%, (3) Possible 20-50%, (4) Unlikely 1-20%, (5) Rare <1%.

Environmental Management is an integral part of our planning, maintenance and operation of our assets. Our Environmental Management System is certified under ISO 14001. We measure the environmental impact of our activities, monitoring, identifying and implementing action plans to reduce impacts at each of our assets. We have defined requirements to be fulfilled by our operation and maintenance suppliers, including environmental audits, monitoring environmental permits and applicable regulatory conditions and implementing best environmental practices.

When evaluating potential investments, the Investment Committee and the Head of Risk evaluate all potential risks related to the potential investment. The Head of Risk is a member of the Investment Committee. The Investment Committee also evaluates how the potential investment would impact Atlantica's climate-related commitments and targets.

Climate change also represents a growth opportunity. We believe that renewable energy should represent the majority of new power generation in the short and mid-term and eventually should be the only way to generate power. We intend to grow our business by investing in and managing sustainable infrastructure, with a focus on North and South America and Europe. We believe that we can create more value over time by investing mostly in assets that avoid greenhouse gas emissions, including energy efficiency and renewable energy assets.

Climate-related physical risk case study:

Situation: In October 2018, Hurricane Leslie hit the north of the Iberian Peninsula. Winds above 150 km/h were registered. Our automatic alerts, based on the Spanish Meteorology System (AEMET), informed about high winds but did not warn about the hurricane. We were able to place our solar panels in protection mode just in time to avoid solar field damages. The corporate operations department learnt that AEMET models were not sufficient to manage this type of risk.

Task: Implement new measures to predict extreme weather events, and prevent business interruption and/or equipment damage.

Action: The Head of Operations identified this risk. Himself and the Head of Risk assigned a financial impact and likelihood to this risk and included it in the risk map. Due

to its importance, the Head of Operations prioritized analyzing industry, sectorial and peers best practices and proposed a comprehensive action plan to the CEO, the Geographic VPs, and the Head of Risk. This plan was approved and implemented by the corporate operations team.

Result: The physical risk management procedures were significantly improved, including: 1) updating our automatic alerts system to include information from the U.S. National Hurricane Center and, 2) preparing a new set of procedures and protocols for extreme weather events. We now have a reliable system that informs us about potential hurricanes and a complete set of procedures on extreme weather events. Since then, we have not suffered significant impacts from extreme weather events.

Climate-related transitional risk case study:

Situation: Our solar U.S. plants are subject to the permits under the Clean Air Act, which is a U.S. federal law designed to protect human health and the environment from the effects of air pollution. The local compliance team internally informed non-compliances could lead to business interruption.

Task: Define asset and corporate responsible to improve preventive and corrective maintenance.

Action: The local compliance team reported this risk to both the Head of Operations and the Head of Risk, who assigned a financial impact and likelihood to the risk and included it in the risk map. The Head of Operations proposed a mitigation plan to the CEO, the Geographic VPs and the Head of Risk that was approved and implemented.

Result: Geographic VPs designated local teams to monitor operations at the plant and to conduct prevention activities to manage and react quickly to any environmental incident under the plans of emergency rehearsed at the facilities. A corporate advanced analytics team was created to improve the performance of our existing technologies, including optimizing preventive and corrective maintenance to avoid any environmental spills and abnormal emissions into the atmosphere. We have a complete set of procedures to comply with the Clean Air Act. We consider non-compliances to the permits under the Clean Air Act to be very low.

## C2.2a

### (C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Non-compliance with current regulation could represent a critical risk for the company, including potential fines and penalties. Atlantica is directly affected by environmental regulation at all our assets. This includes climate-related risks driven by laws, regulation, taxation, disclosure of emissions and other practices. In particular, environmental regulation requires us to obtain and maintain regulatory licenses, permits and other approvals and comply with the requirements of such licenses and permits. We are also required to



		<p>perform environmental impact studies on projects. Non-compliance to current regulation could result in significant financial impacts such as higher operating costs and/or margin reductions.</p> <p>As an example: certain assets are subject to regulation regarding air quality, permits as well as GHG documentation, reporting and carbon regulation. In the U.S., our two solar plants are subject to the permits under the Clean Air Act. We are also subject to the requirements of the U.K. Climate Change Act 2008 on GHG emissions reporting, and the Commission Regulation (EU) No 601/2012.</p> <p>We regularly and systematically review risks at various internal working group and Management Committee meetings. At each of the assets, we have designated teams that monitor operations at the plant, conduct prevention activities and manage and react quickly to any environmental incidents under the emergency plans rehearsed at the facilities. The equipment is subject to preventive and corrective maintenance to avoid any environmental spills and abnormal emissions into the atmosphere.</p> <p>Asset managers at each of the geographies where we operate in, are responsible for monitoring asset activities in line with local regulation and contractual requirements (environmental, permits, servitudes, etc.). Atlantica's Compliance Committee has also delegated some of its duties to local compliance managers. These managers are responsible for managing and solving the day-to-day compliance issues in those geographies under their responsibility, including the supervision of current regulation.</p> <p>We estimate that the risk of violations resulting in fines to be manageable. We also believe that more stringent regulation on GHG emissions and environment will represent an opportunity for us, since we focus on technologies that avoid emissions.</p>
Emerging regulation	Relevant, always included	<p>Changes in regulation could have a negative impact on Atlantica's growth or cause an increase in costs. Renewable energy projects currently benefit from various U.S. federal, state and local governmental incentives. These policies have had a significant impact on the development of renewable energy, and they could change. These incentives make the development of renewable energy projects more competitive by providing tax credits, accelerated depreciation and expensing for a portion of the development costs. A reduction in such incentives could decrease the attractiveness of renewable energy to developers, utilities, retailers and customers. For example, California, where we have one of our largest solar assets, is poised to be powered by renewable resources by 60% by 2030 and 100% by 2045. If, as a</p>

		<p>result of achieving these targets, these and other U.S. states did not increase their targets in the near future, demand for additional renewable energy could decrease.</p> <p>In addition, there may be additional taxes on GHG emissions. Some governments in certain geographies already have mechanisms in place and some other geographies are considering them for the future. It is difficult to forecast carbon cost related regulation.</p> <p>We believe that given the cost reduction we have seen in renewable energies it is highly likely that renewable energy will continue growing even if incentives were limited. Under this scenario, we consider the impact to our existing portfolio to be limited considering that we have long-term agreements in-place that collectively have a weighted average remaining contract life of ~16 years as of June 2021. In addition, when we analyze potential efficient natural gas acquisitions, we always use carbon pricing for emissions. We also have several teams in-place trying to anticipate and/or monitoring new regulation. This includes asset managers and internal compliance and legal teams. Furthermore, we are members of key trade associations in our different sectors and geographies. These trade associations do not have any political impact, however they do help us to identify the latest updates that could affect our businesses, including anticipating potential changes to legislation.</p>
Technology	Relevant, always included	<p>Investment in new technologies and/or the potential impacts of our existing technology becoming less efficient than new technologies are always considered in our risk assessment. New technologies applied to new renewable assets developed and built currently allow to produce electricity in a more efficient manner and at lower costs that what we can achieve with our assets. For example, the cost of PV panels has significantly reduced in the last few years, wind turbines recently built are significantly more efficient than those built years ago and new technologies such as storage and hydrogen, which can complement renewable energy production, are developing rapidly. As a result, newer, more efficient renewable energy technology could lead us to impair the value of our power plants.</p> <p>In our case, the assets we own are contracted or regulated over a long period of time (16 years in average as of June 30, 2021). Our clients need to comply with existing contracts, hence limiting our technology risk exposure associated with not running the most competitive available technology.</p> <p>Emerging technologies may over time affect change in capacity markets and the energy industry overall with the inclusion of distributed</p>

		<p>generation and clean technologies. Technological breakthrough like advances in smart grids, broad consumer adoption of electric vehicles and energy storage devices could affect the price of energy. Regarding new projects, we can work with any technology and we therefore plan to run the most competitive technology at any point in time.</p> <p>In addition, Atlantica relies on IT systems including cloud computing and big data to operate our plants. We have preventive, detective and reactive controls in-place to avoid and/or mitigate cyber-attacks to our plants that could lead to business disruption (i.e., being unable to operate our plants or to access our ERP systems) or to unauthorized release of confidential or protected information. Successful attacks could provoke considerable economic losses due to the costs of recovering from these attacks, loss of revenue from disruption in production or services, and reputational damage and liability risk, including temporary damage to stock value. Our controls in-place are based on international standards, best practices, internal and external audits, and lessons learned from our peers. We have not identified any complaint regarding breaches of violations of privacy and losses of stakeholder data.</p>
Legal	Relevant, always included	<p>Climate-related legal risks (fines, penalties, legal claims and proceedings and requests for arbitration) can arise from non-compliance with associated laws and regulation, or future compliance costs such as decommissioning of our plants (for which we constitute provisions).</p> <p>Atlantica considers that legal aspects are a relevant risk and accounts for it in the risk map.</p> <p>Our legal department is responsible for ensuring compliance with existing obligations as well as analyzing and following up any contingency that could impact us, including climate-related issues. Together with the Internal Audit and Risk Management department, sensitivity analysis is performed to assess different scenario for legal losses.</p> <p>As of to-date we do not have any outstanding significant climate change related claim. We estimate that the risk of climate change violations resulting in fines to be manageable, but we need to maintain our high control standards to keep this potential risk under control. However, as an example, we could be claimed by investors for failure to comply with reporting requirements or report misleading information. It is important to clarify that Atlantica promotes transparency. We report ESG and climate related information following the (i) Global Reporting Initiative (GRI), and (ii) Sustainability Accounting Standards Board</p>

		(SASB) for both Electric Utilities and Solar Energy. We also follow the disclosure recommendations issued by the Task Force on Climate related Financial Disclosures (TCFD).
Market	Relevant, always included	<p>Global trends in the market due to climate change can affect Atlantica and as such they are always included in our risk management system. Atlantica competes with players with diverse profiles, both in terms of size (with major international players) and sectors. Competition is intensifying with key players (oil companies, pension funds, etc.) becoming more active throughout the entire value chain.</p> <p>According to Bloomberg New Energy Finance 2020, in most markets renewable energy is expected to represent the majority of new investments in the power sector. We are already seeing that higher demand for renewable energy has increased competition and has dropped the cost of renewable generation. In some markets (for example: in the United States of America), it is becoming more difficult to find power purchase agreements similar to those that we have in-place: the length of the new contracts is decreasing, and the prices are becoming lower. If we fail to identify sources of growth to offset lower PPA prices in certain regions, we might not be able to deliver on our growth mid-term target (i.e., we target to increase our Cash Available for Distribution (CAFD) per share in the range of 5% to 8% in the upcoming 4 years).</p> <p>Other market risks examples include: (i) lower electricity demand as a result of efficiency regulations and the gradual implementation of technologies such as storage and hydrogen, and (ii) changes to environmental emission rights such as new emissions trading schemes on CO2 prices.</p> <p>Considering our strategy and business model, we believe market trends represent more an opportunity than a risk to us.</p>
Reputation	Relevant, always included	<p>Climate change and ESG are becoming important criteria for shareholders and investors. In 2020 and in the 1st quarter of 2021, we have seen an increased number of funds investing in renewable energy companies and a significant increase in the number of ETFs with a focus on clean energy and ESG investment. While a significant part of our business portfolio consists of renewable energy assets, we also own assets that can be considered less environmentally friendly, including a 300 MW cogeneration plant which uses natural gas and a non-controlling stake in a gas-fired engine facility. This may have a negative reputational impact on Atlantica as a renewable energy company and affect our access to capital.</p> <p>In particular, considering that our growth initiatives are generally</p>

		<p>financed accessing the capital markets issuing either debt or equity, access to capital is a vital part of our growth strategy and our plan of investments. If our reputation worsened, our cost of capital could increase and our access to capital may become more difficult. In addition, some potential employees and /or suppliers could perceive Atlantica as a less appealing company due to a deterioration in our reputation.</p> <p>We aim to reduce our emission rate per unit of energy generated by 70% by 2035. In addition, we intend to grow our portfolio maintaining over 80% of our adjusted EBITDA including unconsolidated affiliates generated from low-carbon footprint assets. When we analyze potential investments in natural gas, we always use carbon pricing for emissions. As long as we maintain this proportion and our investment criteria, we could invest in efficient natural gas assets.</p> <p>In 2020, our good progress on our ESG commitments was corroborated by several top-tier ESG rating entities. In the last 12 months we have leveraged on our positioning in ESG to close ~\$1 billion in new green financing, including green bond issuances, corroborating Atlantica’s good reputation.</p> <p>In addition, we engage with our stakeholders through different channels. Among others, we: (1) have regular meetings with investors and we participate in conferences and sector panels, and (2) proactively manage our social media to include climate change related matters.</p> <p>We believe reputational risks to be low.</p>
Acute physical	Relevant, always included	<p>Atlantica’s business consists of operating sustainable infrastructure. Climate change is causing an increasing number of severe and extreme weather events that are a risk to our facilities, including days of severe winds and rains, winter storms, hail, hurricanes, cyclones, droughts, as well as the risk of fire and flooding, among others. Physical risks which may affect our infrastructure are critical and are always considered in our risk management process.</p> <p>Some examples of acute climate change related physical risks that could affect us are:</p> <ul style="list-style-type: none"> <li>- Severe floods could damage our plants, especially our transmission lines or our solar generation assets. If an unexpected flood runs close to an existing transmission tower it could cause the fall of one or more transmission towers. In particular, some of the towers in our transmission lines are located in areas where we have seen floods in</li> </ul>

		<p>the past. Similarly, floods can damage the solar field at our solar plants.</p> <ul style="list-style-type: none"> <li>- Severe winds could damage the solar fields in our solar assets.</li> <li>- Storms with intense lightning activity could damage our plants, especially our wind farms.</li> <li>- Severe droughts could result in water restrictions or in a deterioration of water properties. Droughts may affect the cooling capacity of our power projects. A deterioration of the quality of the water would have an impact on chemical costs in our water treatment plants at our generation facilities.</li> <li>- If our transmission assets caused a fire, we could be found liable for the damage caused by that fire.</li> <li>- Severe winter weather, like the storm in February 2021 in Texas, could cause supply from wind farms to decline due to wind turbine equipment freezing. Also natural gas assets could trip offline due to operational issues caused by freezing conditions.</li> </ul> <p>Furthermore, components of our equipment and systems, such as structures, mirrors, absorber tubes, blades, PV panels or transformers are susceptible to being damaged by severe weather, including for example hail. In addition, replacement and spare parts for key components may be difficult or costly to acquire or may be unavailable and may have long lead times.</p> <p>Any of those extreme weather events could cause damage to our assets and/or business interruptions.</p> <p>Our asset and Corporate Operations personnel monitor weather conditions in real-time in each of the assets to adopt the required protection measures wherever necessary following our extreme weather procedure.</p>
<p>Chronic physical</p>	<p>Relevant, always included</p>	<p>Physical risks which may affect our sustainable infrastructure are critical and are always considered in our risk management process. An increase in temperatures can reduce efficiency and increase operating costs at our plants, putting new strains on long-term investments and economic growth.</p> <p>The Emissions Gaps Report issued by the United Nations Environment Program in November (UNEP) 2019 states that even if all unconditional Nationally Determined Contributions (NDCs) under the Paris Agreement are implemented, we are on course for a 3.0-3.5 degree Celsius rise during the 21st century. This means an average increase of 0.033°C/year. As an example, the main impacts of rising temperatures include: (1) lower turbine efficiency in our efficient natural gas asset, (2) reduced efficiency at our solar photovoltaic generation assets, (3) lower air density at our wind facilities, (4) higher</p>

		<p>consumption of chemicals used for operational purposes at our solar assets. Under the scenario where we increased the consumption of chemicals, we estimate that a 10% chemical consumption increase would have an estimated additional yearly cost of ~\$0.8 million. Considering that we have historically withdrawn less than 50% of the total water permitted by the regulatory limits in our generating facilities, we believe that even if the temperature increased, we still have margin to withdraw enough water to keep our plants working properly without incurring on additional costs.</p> <p>Additionally, our Corporate Operations Department closely monitors the performance of each asset to identify any potential measures that could improve efficiency. We believe that by improving efficiency, we could potentially offset the potential negative impacts of rising temperatures. The Corporate Operations Department audits all of our assets at least every two years in order to review operational, maintenance, engineering, health and safety and environmental indicators and their compliance with our best practices in order to promote constant improvement. Furthermore, we have an advanced analytics team to improve the performance of our existing technologies. A timely identification of potential maintenance issues allows us to address them quickly and control potentially negative impacts. This advanced analytics team consider chronic physical issues as part of their plan to improve the performance of our existing technologies.</p>
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## C2.3

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

## C2.3a

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Emerging regulation

Carbon pricing mechanisms



### **Primary potential financial impact**

Increased direct costs

### **Company-specific description**

New regulation to limit GHG emissions.

A potential transition risk for Atlantica that may have financial impact on our operating costs are climate change litigation and legislative and regulatory efforts to limit GHG emissions.

At Atlantica, we operate in different geographies with different legislations. While a significant part of our business portfolio consists of renewable energy assets, we also own assets that can be considered less environmentally friendly, including a 300 MW cogeneration plant in Mexico which uses natural gas.

We believe that the impact of new regulation to limit GHG emissions on our current portfolio would be limited. For example, following the contractual agreement of our cogeneration asset in Mexico, we expect to transfer new potential carbon taxes to our client.

We also believe that new regulation to limit GHG emissions could affect our investments opportunities. For example, in the U.S., one of our core geographies, we are not aware of any current or planned congressional attempts to pass legislation to regulate GHG emissions. In the event legislation ultimately passes, the economic and operational impact of such legislation depends on a variety of factors, none of which can be fully known at this time.

At Atlantica, we have implemented a carbon pricing system when evaluating investments. In 2021, we updated our carbon price to approximately \$20-\$35 per ton of CO<sub>2</sub>, compared to \$15-\$25 per ton of CO<sub>2</sub> in 2020.

### **Time horizon**

Medium-term

### **Likelihood**

More likely than not

### **Magnitude of impact**

Medium-low

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

10,500,000

### **Potential financial impact figure – minimum (currency)**

## Potential financial impact figure – maximum (currency)

### Explanation of financial impact figure

\$10.5 million. One of the most likely but unpredictable outcomes is a carbon cost. Carbon costs are challenging to forecast because there is no consensus on the magnitude, timing or need for a carbon cost and may be different by geography. It is difficult to forecast what final form the regulation may take in some of our core geographies. We estimate that the potential financial impact when investing in new assets could be ~\$10.5M.

Hypothesis:

Approximately \$300 million in equity value investments per year during a 5-year period with a majority of these investments in renewable energy. We estimate that approximately 97% of the total equity investment would be in renewable energy assets, transmission infrastructure and water assets, and approximately 3% in natural gas assets.

In particular, we have assumed that: (1) we invest approximately \$10 million per year in efficient natural gas assets during a 5-year period, (representing 3% of our total expected equity investment in such period), (2) new regulation to limit GHG emissions would affect ~50% of scope 1 GHG emissions generated by natural gas assets, and (3) costs cannot be transferred to clients.

- Investment in efficient natural gas = Equity (33%) + Debt (66%) -> Equity (\$50 million) + Debt (\$100 million): \$150 million in five years.
- Expected installed capacity: 163 MW.
- Expected generation per year assuming investments in gas peaking facilities: ~325 GWh.
- Expected GHG Emissions Scope 1 emissions per year: 154 thousand tons of CO<sub>2</sub> (based on the Corporate Accounting and Reporting Standard issued by the GHG Protocol)
- Atlantica's carbon pricing: \$27 per ton of CO<sub>2</sub>.
- New regulation affecting 50% of annual scope 1 GHG emissions: ~\$10.5 million (154 thousand TCO<sub>2</sub> \* 50% \* \$27 T/CO<sub>2</sub> \* 5-year period).

Hypothesis used are based on our business expertise and market estimations.

### Cost of response to risk

600,000

### Description of response and explanation of cost calculation

We estimate the cost to mitigate this risk is \$600 thousand. This cost is based on (1) a percentage of the budgeted internal cost of our local teams in North America (based on the estimated annual time dedicated to identifying new investment opportunities) ~\$200 thousand, and (2) a percentage of the budgeted internal cost of the: (i) Strategy and Corporate Development team (based on the estimated time dedicated to ESG and

climate change matters within investment opportunities), (ii) Operations teams (based on the estimated time dedicated to reducing GHG emissions over time), (iii) legal and compliance team (based on estimated time dedicated to monitor new regulation): ~\$400 thousand.

**Case study:**

**Situation:** New climate change litigation and legislative and regulatory efforts to limit GHG emissions could impact investment opportunities. It is difficult to forecast what final form regulations may take in different geographies.

**Task:** Regularly update the carbon pricing to evaluate investments.

**Action:** The Investment Committee identified this need and requested the Head of ESG to analyze industry, sectorial and peers' best practices and propose a carbon pricing to the Investment Committee.

**Results:** In 2021 the Investment Committee included a \$20-\$35 per ton of CO<sub>2</sub> carbon price when evaluating investment opportunities (vs. \$15-\$25 per ton of CO<sub>2</sub> in 2020).

When the carbon pricing cost was factored in the model, the Investment Committee decided that certain potential investments did not reach the minimum returns required for the specific sector and geography and rejected any potential investment.

**Comment**

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**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Chronic physical

Rising mean temperatures

**Primary potential financial impact**

Increased direct costs

**Company-specific description**

An increase in temperatures can reduce efficiency and increase operating costs at our plants. The Emissions Gaps Report issued by the United Nations Environment Program in November (UNEP) 2019 states that even if all unconditional Nationally Determined Contributions (NDCs) under the Paris Agreement are implemented, we are on course for a 3.0-3.5 degree Celsius rise during the 21st century. This means an average increase of 0.033°C/year.

The main impacts of rising temperatures include:

- Lower turbine efficiency in our efficient natural gas asset in Mexico. This is relevant because our efficient natural gas asset represents approximately 11% of our 2020

revenues.

- Reduced efficiency at our solar photovoltaic generation assets in Spain and Chile, and lower air density at our wind farms in Uruguay. This is relevant because our renewable energy assets represent approximately 74% of our 2020 revenues.
- Higher consumption of chemicals used for operational purposes at our water plants. This is relevant because our water plants represent approximately 4% of our 2020 revenues.

This risk is disclosed in Section 2.2 Task Force on Climate-Related Financial Disclosures (TCFD) of our 2020 ESG Report (page 28, risk 2), publicly available at [https://www.atlantica.com/wp-content/uploads/documents/2020\\_ESG\\_Report.pdf](https://www.atlantica.com/wp-content/uploads/documents/2020_ESG_Report.pdf).

**Time horizon**

Long-term

**Likelihood**

Likely

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

50,000

**Potential financial impact figure – maximum (currency)**

550,000

**Explanation of financial impact figure**

We consider that the main impact of rising temperatures would be associated to the reduction of the cycle efficiency of our turbines, which is partially offset by the lower thermal losses in our solar assets. A 1°C temperature rise could cause yearly losses between 0.04% and 0.21% depending on cooling technology, turbine specifications and site meteorological conditions. The associated financial impact of this potential temperature rise would be approximately \$300 thousand dollars per year in revenues if no additional measures were taken.

A mean temperature rise would also have an impact in our wind facilities. Wind energy is dependent on the air density among other factors. A 1°C temperature rise would imply a reduction on the air density of 0.34% and a reduction of yearly wind generation of approximately 1.2 GWh. The associated financial impact of this measure would be approximately \$100 thousand dollars in revenues.

Regarding photovoltaic plants, module efficiency is reduced above a certain

temperature threshold. When the temperature of the solar panel increases, its output slightly increases while the voltage output is reduced linearly, therefore panel power decreases. A 1°C temperature rise would imply a module efficiency reduction of 0.39%. The associated financial impact of this measure would be approximately 50 thousand dollars in revenues.

Our desalination plants could also be affected by a temperature increase that would imply higher consumption of chemicals used for operational purposes. A 1% increase of chemical consumption would imply extra yearly costs of approximately \$0.1 million.

Based on the previous information, if no additional measures were implemented a 1°C temperature rise could cause a minimum associated financial impact of 50,000 dollars (assuming an impact only on solar assets), and a maximum associated financial impact of 550,000 dollars (considering our efficient natural gas asset, renewable energy assets and desalination plants). This potential financial impact could be extrapolated if temperature rose 3°C (vs. 1°C).

### **Cost of response to risk**

300,000

### **Description of response and explanation of cost calculation**

\$300 thousand. This cost is calculated based on 10% of the budgeted internal cost of our Operations and Advanced Analytics departments (based on the estimated time dedicated to improving efficiency of certain asset components).

Our Corporate Operations Department closely monitors all assets performance to identify any potential measures that could improve efficiency. By improving efficiency, we could potentially offset the potential negative impacts of rising temperatures. The Operations Department performs audits to review operational, maintenance, engineering, health and safety and environmental indicators and their compliance with our best practices in order to promote constant improvement. In addition, we have an advanced analytics team to improve the performance of our existing technologies. A timely identification of potential maintenance issues allows us to address them quickly and control potentially negative impacts.

#### **Case Study:**

**Situation:** The Advanced Analytics team consider chronic physical matters within their plan to improve the performance of our existing technologies. The Advanced Analytics team has worked, jointly with Sulzer, a global leader in fluid engineering, in the deployment of an advanced analytic solution on operational performance of critical pumps in order to control potentially negative impacts.

**Task:** Improve the performance of our existing technologies through real-time predictive maintenance.

**Action:** Sulzer's Blue Box was deployed in several pilot programs at two of our solar power plants. The pilot programs were supervised by our Advanced Analytics team and Sulzer.

**Result:** Sulzer's Blue Box flagged several anomalies on a pump over a couple of days,

indicating that the asset performance deviated from its healthy state. Mitigation actions were implemented, and we were able to reduce operational risks and improve critical pump uptime. In 2020, we received the “Pump Industry Excellence Award for Innovation and Technology” from the Hydraulic Institute, the largest association of pump industry manufacturers in North America. We were recognized for our leadership in driving digital innovation in artificial intelligence, machine learning and anomaly detection for predictive maintenance. We expect this type of advanced technologies to reduce operational risks, improve asset efficiency and offset the potential negative impacts of rising temperatures over time.

### **Comment**

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### **Identifier**

Risk 3

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type & Primary climate-related risk driver**

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

### **Primary potential financial impact**

Decreased revenues due to reduced production capacity

### **Company-specific description**

Climate change is causing an increasing number of severe and extreme weather events that are a risk to our facilities, including days of severe winds and rains, hail, hurricanes, cyclones, droughts, as well as the risk of fire and flooding, among others. Any of these extreme weather events could cause damage to our assets and/or business interruption.

Our assets were designed and built by third parties complying with technical codes, local regulations and environmental impact studies. Technical codes should consider extreme weather events based on historical information and should include design safety margins. However, an increased severity of extreme weather events could have an impact on our assets.

- Severe floods could damage our transmission lines or our generation assets. If an unexpected flood runs close to an existing transmission tower (i.e. Peru and/or Chile) it could cause the fall of one or more transmission towers. Floods can also damage the solar fields at our solar plants.
- Severe winds could damage the solar fields at our solar assets in the U.S, Spain and South Africa.
- Storms with intense lightning activity could damage our plants, especially our wind

farms in Uruguay.

- Severe droughts could result in water restrictions or cause deterioration at our water assets. Deteriorated water quality would have an impact on chemical costs in our water treatment plants at our generating facilities.
- If our transmission assets caused a fire, we may be found liable for the damage caused by that fire.
- Severe winter weather, like the storm in February 2021 in Texas, could cause supply from wind farms to decline due to wind turbine equipment freezing. Also natural gas assets could trip offline due to operational issues caused by freezing conditions.

Furthermore, components of our equipment and systems, such as structures, mirrors, absorber tubes, blades, PV panels or transformers are susceptible to being damaged by severe weather, including for example hail. In addition, replacement and spare parts for key components may be difficult or costly to acquire or may be unavailable and may have long lead times.

The aforementioned extreme weather events are important to Atlantica as these could damage our renewable energy assets and transmission lines. These business sectors represent 74% and 10% of our 2020 revenues, respectively.

This risk is disclosed in Section 2.2 TCFD of our 2020 ESG Report (page 27, risk 1).

**Time horizon**

Medium-term

**Likelihood**

Unlikely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

200,000

**Potential financial impact figure – maximum (currency)**

3,500,000

**Explanation of financial impact figure**

There is a wide range of acute physical events that could affect our assets. It is difficult to assess the economic financial impact this may have.

If we evaluate a potential loss of production caused by an acute physical event, for example, having one of our solar assets in Spain producing for one month at an availability level of 60% because of a cyclone, could result in average in a loss of



revenue of ~\$200 thousand per 50MW installed capacity solar asset.

In addition, having one of our wind assets producing for one month at an availability level of 60% because of a cyclone would result in an average loss of revenue of ~\$600 thousand per 50MW installed capacity wind asset.

An extreme weather event would generally be considered as a “force majeure” event under our transmission line contracts and as a result, it would not reduce our revenue.

The financial impact figures have been calculated based on contractual agreements. We believe having one of our solar assets producing for one month at an availability level of 60% represents a good example of an extreme weather event based on the solar field damages caused by micro-burst severe winds in 2016 at Solana, one of our U.S. solar assets.

Worst-case scenario: loss of revenue in one of our assets in the U.S.

Having one of our solar assets producing for one month at an availability level of 60% because of a cyclone, could result in average in a loss of revenue of approximately \$3.5 million based on 2020 generation (in MWh).

Potential financial impact figure – maximum: \$3,500,000 (i.e., average loss of revenue for one month at a 60% availability level in one of our largest solar power plants).

Potential financial impact figure – minimum: \$200,000 (i.e., average loss of revenue for one month at a 60% availability level per 50 MW installed capacity wind asset).

### **Cost of response to risk**

600,000

### **Description of response and explanation of cost calculation**

The cost of response to this risk is calculated as a ~1% of the insurance cost (disclosed in our financial statement reporting) and a 5% of the budgeted internal costs (~\$200 thousand) of our insurance and the operations departments (based on the estimated time dedicated to monitoring these types of events).

The operations department monitors constantly and on real time weather conditions in each asset to take the required protection measures if necessary. As a result of a past wind event in Solana, one of U.S. assets, we updated our risk management process and procedures including:

- i. Development of a new automated wind trigger based on local weather forecasting and,
- ii. Modification of the stow position and the control logic to reduce stow times.

To mitigate severe and extreme weather events, we also have:

1. An insurance policy covering physical damage and operational business interruption,
2. A crisis management procedure defining specific action plans for all our assets,
3. An automatic alert system using information from U.S. National Agencies,
4. A specific procedure for extreme weather.

In addition, we do not have any hedge contract in place with an obligation to deliver electricity with the potential risk of having to purchase it at market price.

**Case Study:**

**Situation:**The term "Huaico" is used in Peru for the mudslide and flash flood caused by torrential rains occurring high in the mountains from December to February. Atlantica owns 3 transmission lines in Peru. In 2016 one of our towers fell due to heavy rains. We undertook all necessary measures to minimize their impact, internally updated our procedures and shared the lessons learned. In February 2019 our Operations Department received an alert of potential heavy rains that could occur where our towers are located.

**Task:** Implement immediate actions and remediation plans to prevent damages to our tower structures.

**Action:** Immediate action was taken in February 2019 by the corporate operations team and local employees following our procedures. In addition, the Operations team performed an audit to all the towers affected by floods and evaluated the potential risk and impact.

**Result:** 2019 Huaico did not affect our transmission lines demonstrating our procedures effectiveness. We did reinforce certain structures after the operations team audit. We shared lessons learnt with the rest of our geographies. We continue to perform periodical audits to confirm the good condition of the tower structures

**Comment**

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**Identifier**

Risk 4

**Where in the value chain does the risk driver occur?**

Downstream

**Risk type & Primary climate-related risk driver**

Chronic physical

Rising mean temperatures

**Primary potential financial impact**

Increased credit risk

**Company-specific description**

Some of our clients are large utilities or industrial corporations. These are also exposed to significant climate change related risks, including heavy regulation, acute and chronic physical risks. A negative climate-related risk impact on our clients could lead to their inability to comply with their obligations under our existing contract.

Like us, large utilities and industrial corporations generally comply with the highest ESG and climate change standards. Regulation also requires additional investment.

For example, one of our off-takers, PG&E, a large utility company in California, filed for

bankruptcy protection under Chapter 11 due to liabilities related to its potential involvement in wildfires in California in 2017 and 2018. PG&E is the off-taker for our Mojave asset and emerged from Chapter 11 on July 1, 2020. During this process, California Legislature approved Assembly Bill 1054 which among other reforms created a Wildfire Fund, which would be available for eligible electric utility companies to pay eligible claims for liabilities arising from wildfires.

We believe that our clients and in particular utilities, could face climate-related risks similar to the ones we face. PG&E continues to face the risk of wildfires in California, even if the regulation changed. A negative financial impact from a climate-related risk on our clients can cause their inability to comply with their obligations under our existing contract.

This risk is disclosed in Section 2.2 Task Force on Climate-Related Financial Disclosures (TCFD) of our 2020 ESG Report (page 31, risk 7).

**Time horizon**

Short-term

**Likelihood**

Unlikely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

111,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

Worst-case scenario: If climate-related risks affected one of our largest assets, meaning that we would not be able to receive any income from this asset during a year, the impact could be a \$111 million loss of revenue (in one year). This amount represents ACT's 2020 revenue. ACT is our efficient natural gas in Mexico.

**Cost of response to risk**

400,000

**Description of response and explanation of cost calculation**

It is difficult to assess the cost of response to potential risks related to our clients as they may be very different in nature and may require different responses. If due to climate-

related risks one of our clients faced an insolvency situation, for example, based on our past experience in the U.S., we estimate that external legal expenses could be approximately \$400 thousand per year.

Case Study:

Situation: In 2017- 2018 wildfires broke out in California, they were especially catastrophic causing human fatalities and significant material losses. Mojave is one of our assets that is located in California. Its off-taker, PG&E, a large utility company in California, filed for bankruptcy protection under Chapter 11 in 2019 due to liabilities related to its potential involvement in wildfires. PG&E emerged from Chapter 11 on July 1, 2020.

Task: Avoid a material adverse effect on our business, financial condition, results of operations and cash flows. The PG&E bankruptcy heightened the risk that project level cash distributions could be restricted for an undetermined period of time, thereby impacting our corporate liquidity and corporate leverage. Unless the technical event or default was cured or waived, project distributions may not be made during the pendency of the bankruptcy.

Action: Analyze different financing options to mitigate the risk of not being able to get cash distributions from the asset during the process. In addition, Atlantica hired legal advice to take all the measures required during the process.

Result: Given that Atlantica was working on a corporate debt refinancing, a clause was included giving Atlantica an option to capitalize up to 2 years of interest payments, to offset the cash available for distribution ("CAFD") impact of the delay if Mojave distributions were delayed. Atlantica met its CAFD guidance in 2019.

**Comment**

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## C2.4

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

### C2.4a

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

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**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Renewable energy is expected to represent, in most markets, the majority of new investments in the power sector, according to Bloomberg New Energy Finance 2020. Approximately 68% of the world's power generation by 2050 is expected to come from renewable energy sources, which indicates that renewable energy is becoming mainstream. Global installed capacity is expected to shift from 56% fossil fuels today to approximately two-thirds renewables by 2050. In order to make this transition in the power mix, every region will need to complement investments in renewable energy with investments in storage, efficient natural gas and transmission networks.

The opportunity for Atlantica is huge. We intend to grow our business by investing in sustainable infrastructure, with a focus on high-quality, long-term agreements. We believe that we can create more value over time by investing mostly in assets that avoid greenhouse gas emissions, including energy efficiency and renewable energy assets.

Some of our key competitive advantages (vs. other companies) to grow our business include:

- Our asset portfolio has a stable, predictable cash flow profile consisting of predominantly long-life electric power generation and electric transmission assets that generate revenue under long-term fixed priced contracts or pursuant to regulated rates. Additionally, our facilities have minimal or no fuel risk. The off-take agreements for our assets have a weighted average remaining duration of approximately 16 years as of June 30, 2021, providing long-term cash flow stability and visibility.
- Our exposure to international markets should allow us to pursue greater growth opportunities and achieve higher returns than we would have if we had a narrow geographic or technological focus. Our portfolio of assets uses technologies that we expect to benefit from these long-term trends in the electricity sector. Our renewable energy generation assets generate low or no emissions and serve markets where we expect growth in demand in the future. Additionally, our electric transmission lines connect electricity systems to key areas in their respective markets and we expect significant electric transmission investment in our geographies.

This opportunity is disclosed in Section 2.2 Task Force on Climate-Related Financial Disclosures (TCFD) of our 2020 ESG Report (page 32, opportunity 1).

**Time horizon**

Short-term

**Likelihood**

Very likely

### **Magnitude of impact**

High

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

480,000,000

### **Potential financial impact figure – minimum (currency)**

### **Potential financial impact figure – maximum (currency)**

### **Explanation of financial impact figure**

We intend to invest approximately \$300 million in equity value per year during a 5-year period with a majority of these investments in renewable energy. We estimate that approximately 80% of the total investments would be in renewable energy assets. This 80% would represent \$480 million additional revenue over a 5-year period while maintaining at least an 80% of our Adjusted EBITDA including unconsolidated affiliates generated by clean assets, including renewable assets, transmission infrastructure and water assets.

We have calculated the additional revenue based on the following hypothesis and considering \$240 million in equity value per year invested in renewable energy:

- (1) Investment = Equity (33%) + Debt (66%) -> Equity (\$240 million) + Debt (\$480 million) = \$720 million.
- (2) EBITDA per year = (Investment / 10x) -> EBITDA = \$72 million (\$720 million / 10)
- (3) Revenue per year = (EBITDA / 75%) -> Revenue = \$96 million (\$72 million / 75%)

Additional revenue over a five-year period would represent approximately 480 million dollars (\$96 million \* 5 years).

Hypothesis used are based on our business expertise and market estimations.

### **Cost to realize opportunity**

4,300,000

### **Strategy to realize opportunity and explanation of cost calculation**

The cost to realize this opportunity (\$4.0 million) includes:

- \$3.0 million external costs to finance these investments (1% of \$300 million equity investments = \$3.0 million).
- \$1.3 million of the total budgeted costs of the Corporate Development department.

Case Study:

Situation: We have an ambitious plan to continue growing our renewable energy business. In early 2021 we shared our expected equity investments for the following 3

years, we estimate to invest approximately \$300 million per year in order to achieve our 5-8% CAFD per share growth target set for 2024. Additionally we have set a new ambitious GHG emissions target, setting out to achieve a 70% reduction in Atlantica's emission rate per unit of energy generated by 2035 versus the 2020 base year. We are also committed to ensuring that over 80% of our adjusted EBITDA, including unconsolidated affiliates, continue to be generated from low-carbon footprint assets such as renewable energy, storage, transmission infrastructure and water assets.

Task: Benefit from the expansion of low emissions goods and services. The geographic VPs and/or the Investment Committee to deliver on our growth sustainable strategy by: 1) optimizing the existing portfolio, escalation factors at many of our assets and the expansion of current assets, 2) acquiring assets from third parties, 3) entering into and intend to enter into agreements or partnerships with developers, 4) investing directly and through investment vehicles with partners in assets under development or construction

Action: The Investment Committee analyzed multiple investment opportunities during 2020 and 2021. In 2020, the committee closed the acquisition of ~\$300 million in renewable energy assets. In 2021 the investment committee has agreed acquisitions and investments over \$350 million (~95% in renewable energy assets). The CEO presented 2020 and 2021 transactions to the Board and these were approved.

Result: By investing in renewable assets we believe to be in the good path to achieve our CAFD and climate change related targets.

\*Cash Available for Distribution is one of Atlantica's key metrics. Most of our investors consider our CAFD metric to measure Atlantica's performance.

## Comment

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## Identifier

Opp2

## Where in the value chain does the opportunity occur?

Direct operations

## Opportunity type

Products and services

## Primary climate-related opportunity driver

Other, please specify

Access to capital markets

## Primary potential financial impact

Increased access to capital

## Company-specific description

We believe stakeholders prefer sustainable products and services such as low-carbon and renewable energy rather than non-renewable energy. We are already seeing how climate change and ESG are becoming important criteria for shareholders and



investors. Many investors have integrated climate change in their investment analysis, numerous companies are selecting their suppliers preferentially based on the environmental impact of their products or services and, customers are proactively and voluntarily improving their ESG and climate change commitments.

Atlantica relies on debt and equity capital markets to fund its growth strategy. Having access to a larger number of investors is key for our business development. We have already expanded sources of financing products available through green financing (green bonds, green loans, etc.). In 2020, we closed approximately \$600 million in new Green Financing and in May 2021 we issued a \$400 million green bond. We believe our access to green financing will continue to help us expand our financing options to execute on our growth strategy.

This opportunity is disclosed in Section 2.2 Task Force on Climate-Related Financial Disclosures (TCFD) of our 2020 ESG Report (page 33, opportunity 4).

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

4,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

According with MSCI's study related to ESG and the cost of capital, companies with a low ESG rating have a higher cost of capital than companies with a high ESG rating. In the MSCI World Index, the average cost of capital of the highest-ESG-scored quintile was 6.16%, compared to 6.55% for the lowest-ESG-scored quintile, which is a difference of 0.39%.

Our gross corporate debt amounted to approximately \$994 million as of December 31, 2020. If the average cost increased by 0.39% (i.e., based on the difference between the highest and the lowest average cost of capital disclosed in MSCI's study), it could result in an annual additional cost of approximately \$4.0 million.

### **Cost to realize opportunity**

520,000

### **Strategy to realize opportunity and explanation of cost calculation**

The cost to realize this opportunity corresponds to the 20% of the budgeted costs of the Investor Relations and ESG department: \$520 thousand. The total budgeted cost amounted approximately \$1.7 million.

#### Case Study:

**Situation:** Sustainability has been a core part of our DNA since our incorporation. Our strategy focuses on climate change solutions in the power and water sectors. Growth initiatives over time will require us to access the capital markets, issuing either debt or equity. Access to capital is an important part of our growth strategy and our plan of investments.

**Task:** Finance our growth initiatives while promoting and maintaining a good reputation among all our stakeholders.

**Action:** The finance committee requested the Head of ESG to prepare all the necessary documentation to issue green financing (i.e., green bonds and loans) to increase access to capital. The Head of ESG launched a 3-step process that consisted of: (1) Preparing a green finance framework aligned with the Green Bond Principles and the Green Loan Principles, (2) hiring Sustainalytics to issue a Second Party Opinion on the green finance framework, and (3) issuing a green finance report.

**Result:** In 2020, we developed a Green Finance Framework to issue green finance instruments to finance or refinance renewable energy infrastructure, as well as transmission lines dedicated to bringing renewable energy to the grid. The Framework is aligned with our strategy and the use of proceeds will contribute to the advancement of the UN SDGs of Affordable and Clean Energy. The framework has a Second Party Opinion (SPO) delivered by Sustainalytics. In April 2021, following the Green Finance Framework reporting requirements, we published a Green Finance Report on our website disclosing the disbursement of funds to eligible green projects. In the last 12 months we have leveraged our positioning in ESG to close approximately \$1 billion in new green financing. All the documentation is publicly available on our website (<https://www.atlantica.com/web/en/investors/green-financing/>).

### **Comment**

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### **Identifier**

Opp3

### **Where in the value chain does the opportunity occur?**

Direct operations

### **Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues through access to new and emerging markets

**Company-specific description**

According to Bloomberg New Energy Finance 2020, regions will need to complement investments in renewable energy with investments transmission networks. In particular, it is estimated that \$14 trillion in expected investment globally are needed between now and 2050 in transmission and distribution to support renewable energy development.

At Atlantica, we believe transmission lines have a central role in energy transition. Renewable energy is going to represent the majority of new power generation in the short and mid-term. However, in the short and mid-term large investments will be required in new “smarter” transmission and distribution networks that can support renewable generation over the mid-term. The expected increase in renewables is a challenge for current transmission grids in many regions and investments will be necessary. We currently own three transmission lines in Peru and four in Chile, as well as a minority interest in a transmission line under construction in the United States. We believe that current regulations in Peru and Chile provide a growth opportunity by expanding transmission lines to connect new clients. For example, in Peru, where we own two large backbone transmission lines, if a potential new client needs access to our lines, we could build the required equipment, such as a substation and a new portion of line to allow that connection and becoming the owner of that new asset. This is what we call “expansions” of our lines. We have already done this in the past. In addition, we can get contacted by potential customers building renewable assets who need a connection to the grid. We believe we can achieve organic growth through similar opportunities.

This opportunity is disclosed in Section 2.2 Task Force on Climate-Related Financial Disclosures (TCFD) of our 2020 ESG Report (page 33, opportunity 3).

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

25,000,000

### **Potential financial impact figure – maximum (currency)**

150,000,000

### **Explanation of financial impact figure**

We estimate that we can expand our transmission lines investing in the range of \$15 to \$25 million per year.

Based on our historical transmission line expansions investments such as (i) ATN Expansion 1 and, (ii) ATN Expansion 2 (connecting a solar PV asset and a wind plant to the grid), we expect this type of investments could translate in an increase in our revenue in the range of \$5 to \$10 million per year. This can represent \$25 to \$50 million over the next five years (i.e., this range represents the per annum figures x5).

In addition, we expect to have opportunities to invest in new transmission lines. If for example, we were able to invest externally twice what we expect to invest through expansion, that could represent up to \$100 million in additional revenues coming from new transmission lines over a five-year period.

Revenues could be increased over a five year period by: (1) Transmission line expansions (\$25 to \$50 million) and, (2) new transmission lines (up to \$100 million). Consequently:

Potential financial impact figure – minimum: \$25 million (assuming no new transmission lines, only expansions).

Potential financial impact figure – maximum: \$150 million (assuming both new transmission lines and expansions).

### **Cost to realize opportunity**

1,500,000

### **Strategy to realize opportunity and explanation of cost calculation**

The cost to realize this opportunity (\$1.5 million) includes:

- \$0.2 million external costs to finance these investments (1% of \$20 million equity investments = \$0.2 million).
- Total budgeted costs of the Corporate Development department: \$1.3 million .

#### **Case Study:**

**Situation:** We own or have an interest in a portfolio of diversified assets in terms of business sector and geographic footprint. We are currently focused on North America, South America and certain EMEA regions. We have identified new market opportunities in different countries within these regions, and in sectors where we have a smaller presence today. In some cases, we expect to capture opportunities by acquiring operational assets, by investing in assets or by partnering in new assets.

**Task:** Identify new transmission line investment opportunities to meet our growth target.

**Action:** Our local and corporate development teams actively identify and analyze investment opportunities.

**Result:** We have closed two expansions of our existing assets in South America, we

have an investment in a minority interest in a transmission line under construction in the United States, one of our core geographies and we currently have several potential opportunities in our pipeline. We expect this transmission line to contribute meeting the aforementioned growth target.

**Comment**

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## C3. Business Strategy

### C3.1

**(C3.1) Have climate-related risks and opportunities influenced your organization’s strategy and/or financial planning?**

Yes

### C3.1b

**(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?**

	Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment
Row 1	Yes, in the next two years	Yes, we intend to include it as a scheduled AGM resolution item	Our Board has approved a new ambitious GHG emissions reduction target to reduce Atlantica's emission rate per unit of energy generated by 70% by 2035 vs. 2020 base-year. This objective is particularly aggressive for a company like ours, where ~75% of the business consists of renewable energy production, an activity which already has a very low rate of emissions per unit of energy produced, well below the average power production activities in traditional utilities. In addition, we are committed to maintaining over 80% of our adjusted EBITDA including unconsolidated affiliates generated from low-carbon footprint assets, such renewable energy, storage, transmission infrastructure and water assets. We expect to continue expanding our renewable capacity while complying with our environmental targets. We believe that targeting long-term financial and non-financial climate change related goals demonstrates our robust commitment to sustainability

			<p>and emphasizes the importance of climate change mitigation in our long-term strategy.</p> <p>We have submitted this target to the Science Based Targets (SBT) organization for approval and our expectation is to have it formally approved in the upcoming months. If approved, we will then decide if we finally publish a low carbon transition plan and if we include it as an AGM resolution item.</p>
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### C3.2

#### (C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

### C3.2a

#### (C3.2a) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
IEA Sustainable development scenario Other, please specify IEA WEO States Policies Scenario (STEPS)	<p>i) Atlantica develops analysis of climate scenarios, risks and opportunities to increase the robustness and resilience of the company. We reviewed several different climate change scenarios and selected two scenarios that met the TCFD recommendations and were most relevant to our business model: (1) IEA World Energy Outlook (WEO) Sustainable Development Scenario – which provides a high-transition low-carbon pathway, and (2) IEA WEO States Policies Scenario (STEPS) - which provides a low-transition, high-carbon pathway.</p> <p>ii) The low-carbon pathway (scenario) models out a warming potential of well-below 2 degrees by 2100. The high-carbon pathway (scenario) models out a warming potential of approximately 3 degrees by 2100.</p> <p>iii) All Atlantica’s operations have been considered in the scenario analysis.</p> <p>iv) Key scenario hypothesis:</p> <p>Low-carbon scenario: (1) Market changes: strong growth opportunity for the energy utility business. Companies will deal with increased competition from players that are transitioning away from oil and gas. (2) Technologies will drive significant innovation, including storage and green hydrogen. (3)Regulatory: (a)Aggressive low-carbon policy will encourage the business to change business models. (b) Carbon price assumed of ~\$100/ton of CO2e improves</p>

the value of renewable energy, new and emerging low-carbon energy technologies and energy efficiency programs. (4) Physical risks are minimized but remain relevant: increased rates of precipitation; a decrease in cooling days; and increased intensity, frequency and duration of droughts, wildfires, storms and floods.

High carbon scenario (1) Market changes: continued access to low-cost natural gas remains strong with climate change impacts inducing water stress. (2) Technology changes and decreased prices will enable gradual integration of renewables and battery storage. (3) Regulation: (a) Lack of policy action presents an opportunity for the business, as there are fewer regulatory and non-regulatory disruptions. However, differentiated climate change policies across jurisdictions raise business complexity and potential misalignment across regions. (4) Physical risks: increased frequency and intensity of climate-related physical impacts.

v) The results of the scenario analysis have confirmed that our business model and strategy are aligned with climate science. Commitments such as the use of an internal carbon price or a science based target are ambitious targets for this purpose.

vi) Case study:

Situation: To stay well-below 2°C global warming by 2100, the world needs to have global carbon emissions by 2030 and reduce emissions to net-zero by 2050 at the latest. Our target to reduce our GHG emission rate per unit of energy generated by 10% by 2030 (vs. the 2018 year base) was not sufficient to stay well-below 2°C global warming target.

Task: To set a more ambitious GHG emissions reduction target even for a company like ours, where ~75% of the business consists of renewable energy production, an activity which already has a very low rate of emissions per unit of energy produced.

Action: The Head of ESG analyzed industry, sectorial and peers' best practices and proposed a new emissions target to management. The CEO, as part of his climate change related responsibilities, analyzed, supervised and proposed this new target to the Board of Directors.

Result: The Board has approved the new target to reduce its emission rate per unit of energy generated by 70% by 2035 vs. the 2020 year base. We have submitted this target to the SBT organization for approval and our expectation is to have it formally approved in the upcoming months (i.e., in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement, limiting global warming to well-below 2°C above pre-industrial levels).

### C3.3

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>This is an opportunity to develop and/or expand low emission goods and services.</p> <p>Description: Our Purpose is to support the transition towards a more sustainable world by investing in and managing sustainable infrastructure, while creating long-term value for our investors and the rest of our stakeholders. To do so, we intend to take advantage of and leverage our growth strategy on favorable trends in clean power generation, energy scarcity and the focus on reducing carbon emissions.</p> <p>Time horizon: short term (1-2 years).</p> <p>Case study of a substantial strategic decision made for products and services.</p> <p>Situation: We have challenging growth and climate related targets in place. In early 2021, we disclosed our expected equity investments for the next 3 years. We estimate to invest ~\$300 million per year in order to achieve 5-8% CAFD* per share growth target set for 2024. We have also set a new ambitious GHG emissions target setting out to achieve a 70% reduction in our emission rate per unit of energy generated by 2035 vs. 2020 base year. In addition, we are committed to maintaining over 80% of our adjusted EBITDA, including unconsolidated affiliates, generated from low-carbon footprint assets.</p> <p>Task: The geographic VPs and/or the Investment Committee to deliver on our growth sustainable strategy by: 1) optimizing the existing portfolio, escalation factors at many of our assets and the expansion of current assets, 2) acquiring assets from third parties, 3) entering into and intend to enter into agreements or partnerships with developers, 4) investing directly and through investment vehicles with partners in assets under development or construction</p>



		<p>Action: The Investment Committee analyzed multiple investment opportunities during 2020 and 2021. In 2020, the committee closed the acquisition of ~\$300 million in renewable energy assets. In 2021 the investment committee has agreed acquisitions and investments over \$350 million (~95% in renewable energy assets). The CEO presented 2020 and 2021 investment opportunities to the Board and these were approved.</p> <p>Result: By investing in renewable assets we are delivering on Our Purpose, and we believe to be in the good path to achieve our CAFD and climate change related targets.</p> <p>*Cash Available for Distribution is one of Atlantica’s key metrics. Most of our investors consider our CAFD metric to measure Atlantica's performance.</p>
Supply chain and/or value chain	Yes	<p>Our suppliers and customers are impacted by climate change in similar ways than we are. Potential weather adverse effects of climate change in their operations could negatively impact our own operations. Our suppliers and customers may be affected by changes in environmental regulation, extreme weather conditions, natural disasters arising from climate change and global warming. When engaging with our suppliers, we take into consideration the environmental and climate change impacts that their products and services can have. Engaging with suppliers that do not share our climate and environmental goals can prevent us from reaching our emissions targets and/or can affect negatively Atlantica's reputation, which could negatively affect Atlantica's results and operations.</p> <p>Time horizon: short term (1-2 years).</p> <p>Most substantive decision case study:                  Situation: To achieve our environmental goals, we seek to minimize supply chain risks and engage with third parties who operate under principles similar to ours.                  Task: Identify and mitigate climate change related risks in our supply chain.                  Action: The purchasing, compliance and ESG departments jointly analyzed (i) industry, sectorial and peers best practices to update and/or implement new lines of defense to mitigate risks from our supply chain, and (ii) new supply-chain management targets.                  Result: In 2020 we updated and implemented new lines of defense. The compliance department internally prescreened 100% of new suppliers, and Ecovadis, a third party supplier,</p>

		<p>externally prescreened over 51% of the Company's annual operating expenses in terms of (i) environment including climate change, (ii) fair labor and human rights, (iii) ethics, and (iv) sustainable procurement. Three suppliers were disqualified by Atlantica in the pre-screening process (vs. none 2019). In addition, the compliance department started a new annual supplier evaluation assessment (verified 20% of the company's 2020 total purchases). Also in 2020, 3 new supply-chain management targets were set (publicly available in Section 3.3 Supply Chain Management of our 2020 ESG Report).</p> <p>We have been able to minimize climate change related risks in our supply chain and we plan to continue to improve our suppliers' engagement until we accomplish our new supply chain targets.</p>
Investment in R&D	Yes	<p>We are a sustainable infrastructure company that owns a diversified portfolio of operational renewable energy, storage, efficient natural gas, electric transmission and water assets. Our business model relies on using third party proven technologies at our assets and we therefore do not invest significant amounts on Research and Development. Nevertheless, we do work on certain innovative technologies that can help us to better manage our assets and maximize their value. We have an in-house Advanced Analytics team to improve the performance of our existing technologies.</p> <p>Time horizon: we plan to continue improving our machine learning and predictive capabilities to reduce operational risks and improve asset efficiency. We do not expect any financial impact in the next two years. We expect our strategy in this area to be affected by climate-related issues in the long-term (5 to 30 years).</p> <p>Most substantive decision case study:</p> <p>Situation: The advanced analytics team consider chronic physical issues as part of their plan to improve the performance of our existing technologies. The Advanced Analytics team worked, jointly with Sulzer, a global leader in fluid engineering, in the deployment of Sulzer's BLUE BOX, an advanced analytic solution on operational performance of critical pumps. This is a substantial decision for Atlantica since BLUE BOX software solution optimizes pump systems</p>

		<p>and processes, maximizing our asset investment while reducing operational risk.</p> <p>Task: Improve the performance of our existing technologies through real-time predictive maintenance.</p> <p>Action: Sulzer’s Blue Box was deployed in several pilot programs at two of our solar power plants. The pilot programs were supervised by our Advanced Analytics team and Sulzer.</p> <p>Result: Sulzer’s Blue Box flagged several anomalies on a pump over a couple of days, indicating that the asset performance deviated from its healthy state. Mitigation actions were implemented, and we were able to reduce operational risks and improve critical pump uptime. In 2020, we received the “Pump Industry Excellence Award for Innovation and Technology” from the Hydraulic Institute, the largest association of pump industry manufacturers in North America. We were recognized for our leadership in driving digital innovation in artificial intelligence, machine learning and anomaly detection for predictive maintenance.</p>
Operations	Yes	<p>Our local teams at the asset level, our corporate operations teams and our risk management team monitor closely all risks, including climate change risks such as increases in mean temperature, increases in risks of severe weather events or decreases in mean precipitations, among others.</p> <p>This is an impact from risks 2 "Increased severity of extreme weather events such as cyclones and floods" and risk 3 "Rising mean temperatures".</p> <p>Time horizon: We expect our strategy in this area to be affected by climate-related issues in the long-term (5 to 30 years).</p> <p>Most substantive decision case study:                  Situation: In October 2018, Hurricane Leslie hit the north of the Iberian Peninsula. Winds above 150 km/h were registered. Our automatic alerts, based on the Spanish Meteorology System (AEMET), informed about high winds but did not warn about the hurricane. We were able to place our solar panels in protection mode just in time to avoid solar field damages. The corporate operations department learnt that AEMET models were not sufficient to manage this type of risk.</p> <p>Task: Implement new measures to predict extreme weather events, and prevent business interruption and/or equipment</p>

		<p>damage.</p> <p>Action: The Head of Operations identified this risk. Himself and the Head of Risk assigned a financial impact and likelihood to this risk and included it in the risk map. Due to its importance, the Head of Operations prioritized analyzing industry, sectorial and peers best practices and proposed a comprehensive action plan to the CEO, the Geographic VPs, and the Head of Risk. This plan was approved and implemented by the corporate operations team.</p> <p>Result: The physical risk management procedures were significantly improved, including: 1) updating our automatic alerts system to include information from the U.S. National Hurricane Center and, 2) preparing a new set of procedures and protocols for extreme weather events. We now have a reliable system that informs us about potential hurricanes and a complete set of procedures on extreme weather events. Since then, we have not suffered significant impacts from extreme weather events.</p>
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### C3.4

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Acquisitions and divestments Access to capital	<p>We believe stakeholders prefer sustainable products and services such as low-carbon and renewable energy rather than non-renewable energy. There is an increasing number of governments, private companies and investors publicly stating their commitment to support the environment through their business decisions. Funds investing in ESG and clean energy have experienced a very significant growth in recent years and Atlantica’s business model and ESG credentials are very attractive for this type of investors. Atlantica relies on debt and equity capital markets to fund its growth strategy. Having access to a larger number of investors is key for our business development.</p> <p>In order to create value for our shareholders, we need to have a low cost of capital. If Atlantica does not meet investors requirements on ESG disclosure our access to capital markets can decrease. If we are not able to access capital, this may limit our growth plans. In addition, cost of debt could be higher if our ESG rating worsened.</p>

	<p>We believe the access to green financing will help us expand our financing options to execute on our growth strategy. In 2020, we developed a Green Finance Framework to issue green finance instruments to finance or refinance renewable energy infrastructure, as well as transmission lines dedicated to bringing renewable energy to the grid. The Framework is aligned with our strategy and the use of proceeds will contribute to the advancement of the UN SDGs of Affordable and Clean Energy. In the last 12 months we have leveraged our positioning in ESG to close ~\$1 billion in new Green Financing.</p> <p>Financial planning considering climate related:</p> <p>Time Horizon: Short Term (1-2 years)</p> <ul style="list-style-type: none"> <li>- Renewable energy is expected to represent, in most markets, the majority of new investments in the power sector, according to Bloomberg New Energy Finance 2020. Approximately 68% of the world's power generation by 2050 is expected to come from renewable energy sources, which indicates that renewable energy is becoming mainstream. We believe that regions will need to complement investments in renewable energy with investments in storage, efficient natural gas and transmission networks. We believe that Atlantica is well positioned to benefit from the expected transition towards a more sustainable power generation mix. In addition, we believe that water is going to be the next frontier in a transition towards a more sustainable world. New sources of water are needed worldwide, and thus water desalination and transportation infrastructure should help make that possible. Atlantica currently has interests in three water plants with a total capacity of 17.5 million cubic feet per day.</li> </ul> <p>We intend to grow our business by investing in sustainable infrastructure, with a focus on high quality, long-term agreements. We believe that we can create more value over time by investing mostly in assets that avoid greenhouse gas emissions, including energy efficiency and renewable energy assets.</p> <ul style="list-style-type: none"> <li>- The use of public-sector incentives could benefit our growth opportunities. Most countries base their commitments on the development and expansion of renewable energy and intend to reach the Paris Agreement goals through different types of incentives to support renewable energy. For example, in Europe, the green deal is setting a goal of net zero carbon emissions by 2050, and a 50%-55% cut in emissions by 2030 compared with 1990 levels. Similar measures have been adopted in many geographies.</li> <li>- Access to new markets can contribute to increasing revenues.</li> </ul> <p>We intend to take advantage of favorable trends in the power generation and</p>
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		<p>electric transmission sectors globally, while maintaining North America, South America and Europe as our core geographies. We have identified new market opportunities in different countries within these regions, and in sectors where we have a smaller presence today. For example, in December 2020, we reached an agreement to acquire Coso, a 135 MW renewable energy asset in California. Coso is the third largest geothermal plant in the United States. This acquisition was closed in April 2021 and represented our first investment in a geothermal asset.</p> <p>Case Study:</p> <p>Time Horizon: Short Term (1-2 years)</p> <p>Situation: Sustainability has been a core part of our DNA since our incorporation. Our strategy focuses on climate change solutions in the power and water sectors. Growth initiatives over time will require us to access the capital markets, issuing either debt or equity. Access to capital is an important part of our growth strategy and our plan of investments.</p> <p>Task: Finance our growth initiatives while promoting and maintaining a good reputation among all our stakeholders.</p> <p>Action: The finance committee requested the Head of ESG to prepare all the necessary documentation to issue green financing (i.e., green bonds and loans) to increase access to capital. The Head of ESG launched a 3-step process that consisted of: (1) Preparing a green finance framework aligned with the Green Bond Principles and the Green Loan Principles, (2) hiring Sustainalytics to issue a Second Party Opinion on the green finance framework, and (3) issuing a green finance report.</p> <p>Result: In 2020, we developed a Green Finance Framework to issue green finance instruments to finance or refinance renewable energy infrastructure, as well as transmission lines dedicated to bringing renewable energy to the grid. The Framework is aligned with our strategy and the use of proceeds will contribute to the advancement of the UN SDGs of Affordable and Clean Energy. The framework has a Second Party Opinion (SPO) delivered by Sustainalytics. In April 2021, following the Green Finance Framework reporting requirements, we published a Green Finance Report on our website disclosing the disbursement of funds to eligible green projects. In the last 12 months we have leveraged our positioning in ESG to close approximately \$1 billion in new green financing. All the documentation is publicly available on our website (<a href="https://www.atlantica.com/web/en/investors/green-financing/">https://www.atlantica.com/web/en/investors/green-financing/</a>).</p> <p>- Revenues:</p> <p>In 2020, our renewable sector represented ~74% of our revenue with solar energy representing ~70%. We plan to grow our business maintaining an 80% of our portfolio in low-carbon assets. In order to meet our growth targets, we intend to invest approximately \$240 million per year in investments in renewable energy assets, projects and businesses, in terms</p>
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		of equity value. This could result increase our revenues in the range of approximately \$480 million in the upcoming 5 years as described in Opportunity 1 in section 2.4a.
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### C3.4a

**(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

Non applicable

## C4. Targets and performance

### C4.1

**(C4.1) Did you have an emissions target that was active in the reporting year?**

Intensity target

### C4.1b

**(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).**

---

**Target reference number**

Int 1

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Scope 1+2 (market-based)

**Intensity metric**

Metric tons CO<sub>2</sub>e per megawatt hour (MWh)

**Base year**

2020

**Intensity figure in base year (metric tons CO<sub>2</sub>e per unit of activity)**

0.19

**% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure**

100

**Target year**

2035

**Targeted reduction from base year (%)**

70

**Intensity figure in target year (metric tons CO<sub>2</sub>e per unit of activity) [auto-calculated]**

0.057

**% change anticipated in absolute Scope 1+2 emissions**

60

**% change anticipated in absolute Scope 3 emissions**

40

**Intensity figure in reporting year (metric tons CO<sub>2</sub>e per unit of activity)**

0.19

**% of target achieved [auto-calculated]**

0

**Target status in reporting year**

New

**Is this a science-based target?**

Yes, we consider this a science-based target, but it has not been approved by the Science Based Targets initiative

**Target ambition**

Well-below 2°C aligned

**Please explain (including target coverage)**

Following a thorough analysis, the Board of Directors approved a new ambitious GHG emissions target, setting out to achieve a 70% reduction in Atlantica's emission rate per unit of energy generated by 2035 versus the 2020 base year. This is a particularly aggressive target for a company like Atlantica, where renewable energy production – an activity which already has a very low rate of emissions per unit of energy produced and is well below the average power production activities in traditional utilities – accounts for approximately 75% of our business. We have submitted the target to the SBT organization, and we expect to have it formally approved in the upcoming months.

In 2020, our GHG Emission rate per unit of energy generated amounted to 0.19 tons of CO<sub>2</sub>e/ MWh (188 gCO<sub>2</sub>e/kWh).

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**Target reference number**

Int 2



**Year target was set**

2019

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Scope 1

**Intensity metric**

Metric tons CO<sub>2</sub>e per megawatt hour (MWh)

**Base year**

2018

**Intensity figure in base year (metric tons CO<sub>2</sub>e per unit of activity)**

0.19

**% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure**

100

**Target year**

2030

**Targeted reduction from base year (%)**

10

**Intensity figure in target year (metric tons CO<sub>2</sub>e per unit of activity) [auto-calculated]**

0.171

**% change anticipated in absolute Scope 1+2 emissions**

51

**% change anticipated in absolute Scope 3 emissions**

35

**Intensity figure in reporting year (metric tons CO<sub>2</sub>e per unit of activity)**

0.17

**% of target achieved [auto-calculated]**

105.2631578947

**Target status in reporting year**

Replaced

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Target ambition**

**Please explain (including target coverage)**

To stay well-below 2°C global warming by 2100, the world needs to have global carbon emissions by 2030 and reduce emissions to net-zero by 2050 at the latest. Our target to reduce our GHG emission rate per unit of energy generated by 10% by 2030 (vs. the 2018 base year) was not sufficient to stay well-below 2°C global warming target. Hence, we are no longer pursuing this goal and we have replaced it for the current target that is described in the target reference number “Int 1”. Following a thorough analysis, the Board of Directors approved a new ambitious GHG emissions target, setting out to achieve a 70% reduction in Atlantica's emission rate per unit of energy generated by 2035 versus the 2020 base year.

## C4.2

**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Other climate-related target(s)

## C4.2b

**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

---

**Target reference number**

Oth 1

**Year target was set**

2018

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Intensity

**Target type: category & Metric (target numerator if reporting an intensity target)**

Other, please specify

Other, please specify

Maintain over 80% of our adjusted EBITDA, including unconsolidated affiliates, generated from low-carbon footprint assets such as renewable energy, storage, transmission infrastructure and water assets. In USD and at the end of the reporting period.

**Target denominator (intensity targets only)**

Other, please specify

Maintain over 80% of our adjusted EBITDA, including unconsolidated affiliates, in USD and at the end of the reporting period.

**Base year**

2018

**Figure or percentage in base year**

89

**Target year**

2030

**Figure or percentage in target year**

80

**Figure or percentage in reporting year**

87

**% of target achieved [auto-calculated]**

22.2222222222

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

To further demonstrate that climate change mitigation is core to our strategy, our Board is committed to maintain over 80% of our adjusted EBITDA, including unconsolidated affiliates, generated from low-carbon footprint assets such as renewable energy, storage, transmission infrastructure and water assets.

This commitment stands in addition to reducing our GHG Emission rate per unit of energy generated by 70% in 2035 (vs. the 2020 base year).

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain (including target coverage)**

In 2020, 2019, 2018 we managed to grow our portfolio while maintaining at least 80% of our adjusted EBITDA including unconsolidated affiliates generated from low-carbon footprint assets including our renewable, storage, transmission infrastructure and water assets.

## C4.3

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

### C4.3a

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	3	2,100
Implementation commenced*	0	0
Implemented*	1	412
Not to be implemented	0	0

### C4.3b

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

**Initiative category & Initiative type**

Energy efficiency in production processes  
 Other, please specify  
 Implementation of Maximum Use of Gas Policy

**Estimated annual CO2e savings (metric tonnes CO2e)**

412

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

22,477

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

16-20 years

### Comment

We have implemented a maximum use of gas policy to reduce the gas consumption in our assets. We have implemented this initiative at no cost, the first year of implementation of the policy the savings were higher than what we expect to have in the following years. In 2019 (the first year), we saved approximately \$200 thousand and we expect to save \$20 thousand in following years. The GHG emissions are subject to the European Union Emissions Trading System (EU ETS) control. According to current regulation, our installations subject to EU ETS do not receive emission rights free of charge. In other words, our installations must purchase emissions in the market via public auctions. By implementing a maximum use of gas policy, we have reduced the amount of emission rights that we need to buy in public auctions. Monetary savings have been calculated using the average EU ETS price from May 2020 and May 2021. As of June 30, 2021, our accumulated savings due to maximum use of gas policy initiative amount to approximately \$220 thousand.

## C4.3c

### (C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for other emissions reduction activities	<p>In 2020, as part of our commitment to sustainability, Atlantica analyzed several initiatives to mitigate some of our GHG emissions. As a result, in 2020 we offset 200,000 tons of Scope 1 CO2 emissions through Voluntary Carbon Credits. The GHG emissions offsetting mechanism reduced our total GHG emissions by 7% and our scope 1 GHG emissions by 12%. We believe this initiative proves our sustainability focus and further demonstrates Atlantica's commitment to fighting climate change. Going forward we plan to continue voluntarily offsetting our Scope 1 GHG emissions.</p> <p>In addition, to deliver on our growth commitments, we intend to invest ~\$240 million in annual equity value in renewable energy assets during the next five years.</p>
Dedicated budget for low-carbon product R&D	<p>Our business model relies on using third party proven technologies at our assets and we therefore do not invest significant amounts on Research and Development. Nevertheless, we do work on certain innovative technologies that can help us to better manage our assets and maximize their value. We have an in-house Advanced Analytics team to strengthen our machine learning capabilities and improve our real-time predictive maintenance. Our goal is to reduce our operational risks, improve critical equipment uptime and efficiency, thus reducing our Scope 1 GHG emissions. In addition, our Corporate Operations Department closely monitors the performance of each of our assets to identify any potential measures that could improve efficiency.</p>

<p>Internal incentives/recognition programs</p>	<p>Atlantica’s CEO, Geographic VPs and the Head of Strategy and Corporate Development have environmental-related targets as part of their variable compensation. This represents 71% of our key management and 29% of our management. For example, part of the CEO’s short-term variable remuneration is linked to closing accretive investments and these investments have to be aligned with our climate-related goals previously mentioned.</p> <p>Other employees have monetary rewards that include the identification and/or implementation of measures to position Atlantica as a leader in climate change. This includes reducing the environmental impact of our operations, neutralizing GHG emissions, maintaining high ESG performance or implanting Science Based Targets among others. We plan to continue introducing climate-related monetary rewards going forward. Overall, in 2020, approximately 57% of our employees with variable remuneration had targets linked to ESG performance, including climate change related risks.</p>
<p>Financial optimization calculations</p>	<p>Each geographic VP is encouraged to invest in new equipment or make changes to existing installations to improve performance and/or energy efficiency, provided that the investment is profitable within a reasonable period of time.</p>
<p>Internal price on carbon</p>	<p>At Atlantica, when we analyze potential investments in natural gas, we always use carbon pricing for GHG emissions. In 2021, we updated our carbon price to approximately \$20-\$35 per ton of CO<sub>2</sub>, compared to \$15-\$25 per ton of CO<sub>2</sub> in 2020.</p> <p>When the carbon pricing cost has been factored in the investment opportunity model, the Investment Committee has decided that the potential investment was not reaching the minimum returns required for the specific sector and geography and has rejected any potential investment.</p>

## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

## C4.5a

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

---

**Level of aggregation**

Group of products

### **Description of product/Group of products**

In 2020, our renewable sector represented approximately 74% of our revenue with solar energy representing approximately 70%. Following a thorough analysis in 2021, the Board of Directors approved a new ambitious GHG emissions target, setting out to achieve a 70% reduction in Atlantica's emission rate per unit of energy generated by 2035 versus the 2020 base year. Additionally, we are committed to maintaining 80% of our adjusted EBITDA including unconsolidated affiliates from low-carbon footprint assets including our renewable, storage, transmission infrastructure and water assets.

Our focus on renewables and sustainable technologies allows Atlantica to have greenhouse gas emissions rates at significantly lower levels than those normally produced by fossil fuel-power plants. In fact, in 2020 we avoided over 5 million tons of CO<sub>2</sub> only in power generation versus the emissions that an equivalent fossil fuel fleet would have generated. As of the date of this report, our 34 assets consist of: (i) renewable assets with an aggregated total capacity of 2,018 MW, (ii) two efficient natural gas assets: one cogeneration plant of 300 MW, and a 30% stake in a 142 MW gas-fired engine facility (i.e., 43MW), we also have a district heating asset of 55 MWt, (iii) six transmission lines of 1,166 miles in length, and (iv) three water desalination plants with a total capacity of 17.5M ft<sup>3</sup> per day.

The natural gas used at the ACT cogeneration plant is a waste-grade product provided free-of-charge by the off-taker and upcycled by ACT into thermal power.

### **Are these low-carbon product(s) or do they enable avoided emissions?**

Low-carbon product and avoided emissions

### **Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Low-Carbon Investment (LCI) Registry Taxonomy

### **% revenue from low carbon product(s) in the reporting year**

89

### **Comment**

The 89% revenue from low carbon products in 2020 includes:  
Renewable energy: \$753.1 million (75%)  
Transmission infrastructure: \$106.1 million (10%)  
Water plants: \$43.1 million (4%)

## **C-EU4.6**

### **(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.**

Methane emissions are not relevant in our activities. We own and invest in solar and wind assets, efficient natural gas plants, transmission lines and water desalination plants.

These do not result in a notable level of emissions of this type of gas. As such, we do not consider it necessary to establish methane emission reduction targets at this time.

## C5. Emissions methodology

### C5.1

**(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

#### Scope 1

---

**Base year start**

January 1, 2020

**Base year end**

December 31, 2020

**Base year emissions (metric tons CO<sub>2</sub>e)**

1,736,865

**Comment**

Atlantica complies with the 2008 U.K. Climate Change Act on GHG reporting, with the Commission Regulation (EU) No 601/2012, and with the GHG Protocol on GHG quantification. Following the GHG protocol we have classified our emissions into 3 groups:

- Scope 1: Direct emissions of GHG from sources that are owned or controlled by the Company.
- Scope 2: Indirect emissions of GHG from consumption of purchased electricity, heat or steam.
- Scope 3: Indirect emissions of GHG not included in Scope 2 that occur in the Company's value chain, including both upstream and downstream emissions, and the emissions of our nonconsolidated affiliates

#### Scope 2 (location-based)

---

**Base year start**

January 1, 2020

**Base year end**

December 31, 2020

**Base year emissions (metric tons CO<sub>2</sub>e)**

192,052

**Comment**

As a United Kingdom company, Atlantica is subject to, and is in compliance with the requirements of the Climate Change Act 2008 on greenhouse gas emissions reporting. Additionally, our greenhouse gas emissions management complies with the



requirements of the Commission Regulation (EU) No 601/2012. Emissions figures on this report are quantified and reported according to the guidelines of the ISO 14064. Our Scope 2 emissions are indirect emissions of greenhouse gas from consumption of purchased electricity, heat or steam.

### Scope 2 (market-based)

---

**Base year start**

January 1, 2020

**Base year end**

December 31, 2020

**Base year emissions (metric tons CO<sub>2</sub>e)**

199,127

**Comment**

As a United Kingdom company, Atlantica is subject to, and is in compliance with the requirements of the Climate Change Act 2008 on greenhouse gas emissions reporting. Additionally, our greenhouse gas emissions management complies with the requirements of the Commission Regulation (EU) No 601/2012. Emissions figures on this report are quantified and reported according to the guidelines of the ISO 14064. Our Scope 2 emissions are indirect emissions of greenhouse gas from consumption of purchased electricity, heat or steam.

## C5.2

**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations  
ISO 14064-1  
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

## C6. Emissions data

### C6.1

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO<sub>2</sub>e?**

**Reporting year**

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**Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

1,736,866

**Comment**

Scope 1: Emissions of greenhouse gas from sources that are owned or controlled by the Company.

99% of our scope 1 GHG emissions are generated by ACT, our efficient natural gas plant in Mexico.

## C6.2

**(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

### Row 1

---

#### **Scope 2, location-based**

We are reporting a Scope 2, location-based figure

#### **Scope 2, market-based**

We are reporting a Scope 2, market-based figure

#### **Comment**

Scope 2: Indirect emissions of greenhouse gas from consumption of purchased electricity, heat or steam.

Over 99% of our scope 2 GHG emissions are generated by solar power assets and water plants.

## C6.3

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO<sub>2</sub>e?**

### Reporting year

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#### **Scope 2, location-based**

192,052

#### **Scope 2, market-based (if applicable)**

199,127

#### **Comment**

In 2020, Scope 2 GHG emissions (both location and market-based) were verified by DNV GL, an independent expert in assurance and risk management. Additional information is provided section C.10 Verification.

## C6.4

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

## C6.5

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

### **Purchased goods and services**

---

**Evaluation status**

Relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

52,856

**Emissions calculation methodology**

Purchased goods and services emissions have been calculated using an economic input / output analysis using 2020 economic data and relevant emission factors obtained from the CEDA's 5 database. CEDA stands for "Comprehensive Environmental Data Archive", a set of databases designed to assist on environmental system analysis throughout the supply chain. Purchased goods and services represents approximately 6% of our Scope 3 total GHG emissions.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Purchased goods and services emissions have been calculated using an economic input / output analysis using 2020 economic data and relevant emission factors obtained from the CEDA's 5 database. No data has been obtained from suppliers or value chain partners.

### **Capital goods**

---

**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

1,989.5

**Emissions calculation methodology**

Capital goods represents a 0.2% of Scope 3 total emissions. We have calculated Scope 3 using an economic input / output analysis of the reporting period. We have identified six Scope 3 categories that are not relevant (each represents less than 1% of total 2020 Scope 3 emissions). These are:

Category 2: Capital Goods

Category 4: Upstream transportation and distribution

Category 5: Waste Generated in Operations

Category 6: Business Travel

Category 7: Employee Commuting

Category 8: Upstream leased assets

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Capital goods emissions represents 0.2% of our Scope 3 total GHG emissions. Not relevant.

**Fuel-and-energy-related activities (not included in Scope 1 or 2)**

---

**Evaluation status**

Relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

662,876.2

**Emissions calculation methodology**

Fuel-and-energy-related activities (not included in Scope 1 or 2) mainly includes stationary combustion, mobile combustion and electricity consumption and have been calculated following the guidelines of the GHG Protocol standard. We have divided the emissions of this category into three activities: (1) "Well to Tank" emissions from fossil fuels (diesel, natural gas and pooling vehicles); (2) "Well to Tank" emissions from purchased electricity; (3) Emissions due to the generation and transmission and distribution of electricity purchased based on the ratio emission factors of Scope 1 and 2 emissions and the WTT factors of DEFRA. This ratio has been applied to the emission factors of Scope 1 and 2 used by Atlantica to estimate the emissions of this fuel-and-energy-related activities category.

WTT DEFRA stands for "Department of Environment Food and Rural Affairs", GHG conversion factors from resource extraction, production and delivery.

Fuel-and-energy-related activities (not included in Scope 1 or 2) represents approximately an 80.8% of our Scope 3 total GHG emissions.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

Fuel-and-energy-related activities (not included in Scope 1 or 2) mainly includes stationary combustion, mobile combustion and electricity consumption and have been calculated following the guidelines of the GHG Protocol standard.

The emissions have been calculated using third party information.

**Upstream transportation and distribution**

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**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

44.1

**Emissions calculation methodology**

Upstream transportation and distribution represents 0.01% of Scope 3 total emissions. We have calculated Scope 3 using an economic input / output analysis of the reporting period.

We have identified six Scope 3 categories that are not relevant (each represents less than 1% of total 2020 Scope 3 emissions). These are:

Category 2: Capital Goods

Category 4: Upstream transportation and distribution

Category 5: Waste Generated in Operations

Category 6: Business Travel

Category 7: Employee Commuting

Category 8: Upstream leased assets

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Upstream transportation and distribution represents a 0.01% of our Scope 3 total GHG emissions. Not relevant.

**Waste generated in operations**

---

**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

919.4

**Emissions calculation methodology**

Waste generated in operations represents 0.11% of Scope 3 total emissions.

We have calculated Scope 3 using an economic input / output analysis of the reporting period.

We have identified six Scope 3 categories that are not relevant (each represents less than 1% of total 2020 Scope 3 emissions). These are:

Category 2: Capital Goods

Category 4: Upstream transportation and distribution

Category 5: Waste Generated in Operations

Category 6: Business Travel

Category 7: Employee Commuting

Category 8: Upstream leased assets

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Waste generated in operations represent a 0.11% of our Scope 3 total GHG emissions.  
Not relevant.

**Business travel**

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**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

996.5

**Emissions calculation methodology**

Business travel represent 0.1% of Scope 3 total emissions.  
We have calculated Scope 3 using an economic input / output analysis of the reporting period.  
We have identified six Scope 3 categories that are not relevant (each represents less than 1% of total 2020 Scope 3 emissions). These are:  
Category 2: Capital Goods  
Category 4: Upstream transportation and distribution  
Category 5: Waste Generated in Operations  
Category 6: Business Travel  
Category 7: Employee Commuting  
Category 8: Upstream leased assets

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Business travel represents a 0.1% of our Scope 3 total GHG emissions. Not relevant

**Employee commuting**

---

**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

152.8

**Emissions calculation methodology**

Employee Commuting represents 0.02% of Scope 3 total emissions.  
We have calculated Scope 3 using an economic input / output analysis of the reporting period.  
We have identified six Scope 3 categories that are not relevant (each represents less than 1% of total 2020 Scope 3 emissions). These are:  
Category 2: Capital Goods  
Category 4: Upstream transportation and distribution  
Category 5: Waste Generated in Operations

Category 6: Business Travel

Category 7: Employee Commuting

Category 8: Upstream leased assets

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Employee Commuting represent a 0.02% of our Scope 3 total GHG emissions. Not relevant.

**Upstream leased assets**

---

**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

5,669.6

**Emissions calculation methodology**

Upstream leased assets represents 0.7% of Scope 3 total emissions.

We have calculated Scope 3 using an economic input / output analysis of the reporting period.

We have identified six Scope 3 categories that are not relevant (each represents less than 1% of total 2020 Scope 3 emissions). These are:

Category 2: Capital Goods

Category 4: Upstream transportation and distribution

Category 5: Waste Generated in Operations

Category 6: Business Travel

Category 7: Employee Commuting

Category 8: Upstream leased assets

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Upstream leased assets represents a 0.7% of our Scope 3 total GHG emissions. Not relevant.

**Downstream transportation and distribution**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Atlantica does not offer tangible products. This category is not relevant.

**Processing of sold products**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Atlantica does not offer tangible products. This category is not relevant.

**Use of sold products**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Atlantica does not offer tangible products. This category is not relevant.

**End of life treatment of sold products**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Atlantica does not offer tangible products. This category is not relevant.

**Downstream leased assets**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

There are no assets of the company leased to other entities during 2020 not included in Scope 1 and 2.

**Franchises**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Atlantica does not own franchises. This category is not relevant

**Investments**

---

**Evaluation status**

Relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

95,219.5

**Emissions calculation methodology**

This investment category includes emissions associated with Atlantica's equity method investments (i.e., those investments where we do not have a controlling stake).

These investments include:



1. 25% stake in the Honaine plant, a water plant.

Honaine's GHG emissions disclosure:

Scope 1: not relevant.

Scope 2: We have primary data on electricity consumption to calculate Scope 2 emissions.

This information has been provided by the operation and maintenance contractor. We have added the 25% of Honaine's Scope 2 emissions to Atlantica's scope 3 GHG emissions

2. 30% stake in Monterrey, a 142 MW gas-fired engine facility including 130 MW installed capacity and 12 MW battery capacity. All Monterrey's emissions correspond to Scope 1 emissions. The information was provided by our partner. We have added the 30% of Monterrey's scope 1 GHG emissions to Atlantica's scope 3 emissions.

This category represents approximately 11.6% of Atlantica's total Scope 3 emissions.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

This investment category includes emissions associated with Atlantica's equity method investments. I.e., non-controlling interest in a desalination plant and in an efficient natural gas plant. The investment category has been calculated using data obtained from the operation and maintenance contractor or our partners.

**Other (upstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Atlantica has no other upstream emissions than those previously explained.

**Other (downstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Atlantica has no other upstream emissions than those previously explained.

## C6.7

**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

## C6.10

**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

---

**Intensity figure**

0.0019

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

1,935,993

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

1,013,260,000

**Scope 2 figure used**

Market-based

**% change from previous year**

17.4

**Direction of change**

Increased

**Reason for change**

The 17% GHG emissions increase in 2020 versus the previous year was mainly because of the major overhaul of our efficient natural gas asset in 2019. As a result, in 2019 natural gas consumption, production and emissions were lower. ACT generates approximately 90% of our total GHG Scope 1 and Scope 2 emissions.

---

**Intensity figure**

0.188

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

1,935,993

**Metric denominator**

megawatt hour generated (MWh)

**Metric denominator: Unit total**

10,278,337

**Scope 2 figure used**

Market-based

**% change from previous year**

2.2

**Direction of change**

Increased

**Reason for change**

The rate of equivalent tons of CO2 emissions per energy generation was 188 gCO2e/KWh (0.188 TCO2/MWh) in 2020 and 185 gCO2e/KWh (0.185 TCO2/MWh) in 2019. In 2020, new renewable generation assets helped to maintain the GHG emissions rate per unit of energy generated in spite of an increase in emissions. In 2019, our efficient natural gas plant had a major overhaul. As a result, production and emissions were lower.

## C7. Emissions breakdowns




### C7.1


**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

### C7.1a

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	1,726,365	IPCC Fifth Assessment Report (AR5 – 100 year)  <sub>1</sub>
CH4	9,641	IPCC Fifth Assessment Report (AR5 – 100 year)  <sub>2</sub>
N2O	859	IPCC Fifth Assessment Report (AR5 – 100 year)  <sub>3</sub>

<sup>1</sup>ACT GHG emissions are calculated using GWP IPCC Fifth Assessment Report (AR5-100 year): 1; 28 ; 265. For solar, wind and water assets, we have used GWP IPCC Second

Assessment Report (SAR-100 year). ACT GHG emission are 99% of total Atlantica Scope 1 GHG emissions.

<sup>2</sup>ACT GHG emissions are calculated using GWP IPPC Fifth Assessment Report (AR5-100 year): 1; 28 ; 265. For solar, wind and water assets, we have used GWP IPPC Second Assessment Report (SAR-100 year). ACT GHG emission are 99% of total Atlantica Scope 1 GHG emissions.

<sup>3</sup>ACT GHG emissions are calculated using GWP IPPC Fifth Assessment Report (AR5-100 year): 1; 28 ; 265. For solar, wind and water assets, we have used GWP IPPC Second Assessment Report (SAR-100 year). ACT GHG emission are 99% of total Atlantica Scope 1 GHG emissions.

## C-EU7.1b

**(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.**

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	312.78	0	8,757.78	Corresponds to fugitives emissions associated to the natural gas distribution within our generation assets.
Combustion (Electric utilities)	1,725,666.26	30.77	0	1,727,344.82	Emissions from stationary combustion in our generation activities.
Combustion (Gas utilities)	0	0	0	0	We do not own gas utilities. Our efficient natural gas asset in Mexico has been included in the row "Combustion (Electric utilities)".
Combustion (Other)	699.13	0.77	0	763.16	Emissions from mobile combustion (i.e., vehicles and

					machinery).
Emissions not elsewhere classified	0	0	0	0	All gross scope 1 emissions are accounted for in the previous categories.

## C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	954
Mexico	1,717,001
Peru	107
Uruguay	58
Chile	19
Spain	18,209
South Africa	473
Algeria	44

## C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

- By business division
- By facility
- By activity

### C7.3a

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO2e)
North America	1,717,954
South America	184
EMEA	18,727

### C7.3b

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Solana	651	32.9213	-112.9793
Mojave	302	35.0139	-117.3293
ACT	1,717,001	17.1015	-93.1157
Transmission lines Perú	45	-10.2994	-76.6469
Hidrocañete	62	-13.0704	-76.3073
Cadonal	29	-33.5982	-56.675
Palmatir	0	-32.5931	-56.4401
Estrellada	29	-32.6035	-54.2292
Chile	19	-38.0017	-71.4739
Solaben1	1,615	39.2292	-5.3983
Solaben2	1,153	39.2292	-5.3983
Solaben3	1,292	39.2292	-5.3983
Solaben6	1,426	39.2292	-5.3983
Solacor1	821	37.9592	-4.5023
Solacor2	796	37.9592	-4.5023
Helioenergy1	1,685	37.5789	-5.1573
Helioenergy2	1,650	37.5789	-5.1573
Helios1	1,319	39.2387	-3.475
Helios2	1,064	39.2387	-3.475

Solnova1	1,144	37.4166	-6.2743
Solnova3	1,022	37.4166	-6.2743
Solnova4	1,449	37.4166	-6.2743
PS10	150	37.4431	-6.2547
PS20	1,622	37.4431	-6.2547
Sevilla PV	0	37.4431	-6.2547
Kaxu	473	-28.8804	19.5928
Skikda	31	36.8833	6.9662
Tenes	14	36.5104	1.2964

### C7.3c

**(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

Activity	Scope 1 emissions (metric tons CO2e)
Renewable energy	19,756
Efficient natural gas	1,717,001
Transmission	64
Water	44

### C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

	Gross Scope 1 emissions, metric tons CO2e	Comment
Electric utility activities	1,736,757	This represents our gross Scope 1 emissions expressed in CO2e from electric generation activities (solar, wind, hydro and efficient natural gas assets).

		Our total Scope 1 GHG emissions amount to 1,736,866 tons of CO <sub>2</sub> , hence our generating assets represent nearly 100% of our total scope 1 GHG total emissions (i.e., 1,736,757 tons of CO <sub>2</sub> / 1,736,866 tons of CO <sub>2</sub> = ~100%).
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## C7.9

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Increased

### C7.9a

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO <sub>2</sub> e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	Our online renewable energy consumption in our renewable assets did not change significantly versus last year.
Other emissions reduction activities	412	Decreased	0.03	Emissions reduction activities.  We have implemented a maximum use of gas policy to reduce the gas consumption in our assets. We have reduced our scope 1 GHG emissions by 412 tons in 2020 vs. 2019.  In 2019, our total Scope 1 and Scope2 emissions were 1,646,239 tCO <sub>2</sub> e. Therefore, the emissions reduction activities represent 0.03% $((412 \text{ tCO}_2\text{e} / 1,646,239 \text{ tCO}_2\text{e}) * 100)$ of the change in our gross total emissions (including Scope 1 and 2 combined).
Divestment	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from divestments.
Acquisitions	78,173	Increased	4.75	Acquisitions.



				<p>In 2020 we acquired Tenes, a 7 M ft<sup>3</sup> per day capacity water desalination plant located 208 km west of Algiers. We have control over Tenes since May 31, 2020 and as a result we have fully consolidated the asset from that date.</p> <p>In 2019, our total Scope 1 and Scope2 emissions were 1,646,239 tCO<sub>2</sub>e. Therefore, the acquisitions represent 4.75% <math>((78,173 \text{ tCO}_2\text{e} / 1,646,239 \text{ tCO}_2\text{e}) * 100)</math> of the change in our gross total emissions (including Scope 1 and 2 combined).</p>
Mergers	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from mergers.
Change in output	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from change in output.
Change in methodology	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from change in methodology.
Change in boundary	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from change in boundary.
Change in physical operating conditions	211,169	Increased	12.87	<p>Change in physical operating conditions.</p> <p>Scope 1 and 2 GHG emissions increased in 2020 versus the previous year was mainly because of the major overhaul of our efficient natural gas asset in 2019. As a result, in 2019 natural gas consumption, production and emissions were lower. ACT generates approximately 90% of our total GHG Scope 1 and Scope 2 emissions, hence explains the 211 thousand tons of CO<sub>2</sub> change in emissions.</p> <p>In 2019, our total Scope 1 and Scope2 emissions were 1,646,239 tCO<sub>2</sub>e.</p>

				Therefore, the acquisitions represent 12.82% $((211,169 \text{ tCO}_2\text{e} / 1,646,239 \text{ tCO}_2\text{e}) * 100)$ of the change in our gross total emissions (including Scope 1 and 2 combined).
Unidentified	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from unidentified reasons.
Other	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from others.

## C7.9b

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Market-based

## C8. Energy

### C8.1

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 5% but less than or equal to 10%

### C8.2

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No

Generation of electricity, heat, steam, or cooling	Yes
--	-----

## C8.2a

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	8,545,132	8,545,132
Consumption of purchased or acquired electricity		0	448,287	448,287
Consumption of self-generated non-fuel renewable energy		293,608		293,608
Total energy consumption		293,608	8,993,420	9,287,027

## C8.2b

**(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

## C8.2c

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

---

**Fuels (excluding feedstocks)**

Diesel

**Heating value**

LHV (lower heating value)

**Total fuel MWh consumed by the organization**

7,485

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

0.0741

**Unit**

metric tons CO2 per GJ

**Emissions factor source**

The emission factor source is IPCC 2006, Chapter 2

**Comment**

In 2020, Atlantica did not consume diesel for self-generation of heat.

---

**Fuels (excluding feedstocks)**

Natural Gasoline

**Heating value**

LHV (lower heating value)

**Total fuel MWh consumed by the organization**

2,332

**MWh fuel consumed for self-generation of heat**

1

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

0.0693

**Unit**

metric tons CO2 per GJ

**Emissions factor source**

The emission factor source is IPCC 2006, Chapter 2.

**Comment**

In 2020, Atlantica primarily consumed natural gasoline to fuel our cars (i.e., 2,332 MWh). Remaining 1 MWh was used for emergency generators and emergency pumps.

---

**Fuels (excluding feedstocks)**

Propane Gas

**Heating value**

LHV (lower heating value)

**Total fuel MWh consumed by the organization**

187

**MWh fuel consumed for self-generation of heat**

187

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

0.0636

**Unit**

metric tons CO2 per GJ

**Emissions factor source**

The emission factor source for ACT calculation is Emissions Factors. Carbon Footprint, Offsetting and Carbon Dioxide Absorption Projects Carbon Dioxide Registration. Version 17. April 2021

**Comment**

Atlantica consumes LNG during the cogeneration process and to generate heat in HTF boilers.

---

**Fuels (excluding feedstocks)**

Liquefied Natural Gas (LNG)

**Heating value**

LHV (lower heating value)

**Total fuel MWh consumed by the organization**

8,535,128

**MWh fuel consumed for self-generation of heat**

42,130

**MWh fuel consumed for self-cogeneration or self-trigeneration**

8,492,998

**Emission factor**

0.0561

**Unit**

metric tons CO2 per GJ

**Emissions factor source**

The emission factor source for ACT calculation is IPPC 2006, Chapter 2

**Comment**

Atlantica consumes LNG during the cogeneration process and to generate heat in HTF boilers.

The emission factor source (0.0561) for ACT calculation is based on IPPC 2006, Chapter 2.

The emission factor source (0.05598) for Spanish solar plants calculation is based on GHG National Inventory (Spain April 2020).

## C-EU8.2d

**(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.**

### Coal – hard

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

-

### Lignite

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

-

**Oil**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

-

**Gas**

---

**Nameplate capacity (MW)**

343

**Gross electricity generation (GWh)**

2,636

**Net electricity generation (GWh)**

2,574

**Absolute scope 1 emissions (metric tons CO2e)**

1,717,001

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

667.08

**Comment**

The ratio of Scope 1 per GWh of electricity is 667.08 tons CO<sub>2</sub>e/GWh. In addition to electricity, our cogeneration plant (ACT) also generates steam (4,463,361 MWh in 2020). The ratio of Scope 1 per GWh generated (considering both electricity and steam generation) amounts to 243.99 tons CO<sub>2</sub>e/GWh.

**Biomass**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

0

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

0

**Comment**

-

**Waste (non-biomass)**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

0

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

0

**Comment**

-

**Nuclear**

---

**Nameplate capacity (MW)**

0



**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

-

**Fossil-fuel plants fitted with CCS**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

-

**Geothermal**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

## Comment

-

## Hydropower

---

### Nameplate capacity (MW)

4

### Gross electricity generation (GWh)

27.5

### Net electricity generation (GWh)

27.5

### Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)

62

### Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)

2.26

## Comment

Our hydropower plant produced 27,5 GWh of electricity in 2020.

## Wind

---

### Nameplate capacity (MW)

150

### Gross electricity generation (GWh)

520.1

### Net electricity generation (GWh)

520.1

### Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)

58

### Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)

0.11

## Comment

We own 3 wind assets (Palmatir, Cadonal, Melowind), 50 MW installed capacity per plant.

## Solar

---

### Nameplate capacity (MW)

1,397

### Gross electricity generation (GWh)

2,986.98

**Net electricity generation (GWh)**

2,693.45

**Absolute scope 1 emissions (metric tons CO2e)**

19,636

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

7.29

**Comment**

We own twelve solar assets with a total installed capacity of 1,397 MW located in North America, South America and EMEA.

**Marine**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

-

**Other renewable**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

-

**Other non-renewable**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

-

**Total**

---

**Nameplate capacity (MW)**

1,894

**Gross electricity generation (GWh)**

6,170.71

**Net electricity generation (GWh)**

5,814.92

**Absolute scope 1 emissions (metric tons CO2e)**

1,736,757

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

298.7

**Comment**

Our total installed capacity from our generating assets amount to 1,894MW.  
Technologies: solar, wind, natural gas and hydro.  
Location: U.S., Canada, Mexico, Chile, Spain and South Africa.  
The total GHG scope 1 emissions from generating assets amount to 1,736,757 metric tons CO2e.

Atlantica's total GHG scope 1 emissions amount to 1,736,866 metric tons CO2e.  
Remaining metric tons CO2e are generated in our water and transmission lines. Not material.

## C-EU8.4

**(C-EU8.4) Does your electric utility organization have a transmission and distribution business?**

Yes

### C-EU8.4a

**(C-EU8.4a) Disclose the following information about your transmission and distribution business.**

---

**Country/Region**

Chile

**Voltage level**

Transmission (high voltage)

**Annual load (GWh)**

1,175

**Annual energy losses (% of annual load)**

5

**Scope where emissions from energy losses are accounted for**

Scope 2 (market-based)

**Emissions from energy losses (metric tons CO<sub>2</sub>e)**

1

**Length of network (km)**

140

**Number of connections**

4

**Area covered (km<sup>2</sup>)**

2.2

**Comment**

The 1,175 GWh Annual Load does not include a 6-mile transmission line. Not material.

Atlantica does not own distribution networks, Atlantica owns and operates transmission lines and does not deliver electricity to end-users. Considering this, it does not deliver electricity to a certain area of the country. We also own a small transmission line that delivers electricity to one single off-taker (not significant). As a result, we have disclosed the area covered by our right of ways within the "area covered (km<sup>2</sup>)" section.

**Country/Region**

Peru

**Voltage level**

Transmission (high voltage)

**Annual load (GWh)**

12,325

**Annual energy losses (% of annual load)**

2.5

**Scope where emissions from energy losses are accounted for**

Scope 2 (market-based)

**Emissions from energy losses (metric tons CO<sub>2</sub>e)**

0

**Length of network (km)**

1,653

**Number of connections**

50

**Area covered (km<sup>2</sup>)**

77

**Comment**

Atlantica does not own distribution networks, Atlantica owns and operates transmission lines and does not deliver electricity to end-users. Considering this, it does not deliver electricity to a certain area of the country. In Peru, ATN and ATS are part of the national interconnected transmission system. ATN2 delivers electricity to one single off-taker. As a result, we have disclosed the area covered by our right of ways within the "area covered(km<sup>2</sup>)" section.

## C9. Additional metrics

### C9.1

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

---

**Description**

Other, please specify  
Water withdrawal for power generation

**Metric value**

1.56

**Metric numerator**

Cubic meters of water withdrawn (m3)

**Metric denominator (intensity metric only)**

MWh generated

**% change from previous year**

8.62

**Direction of change**

Decreased

**Please explain**

Power generation:

1. Renewable energy assets: Our renewable energy segment uses water in its power generation process. Atlantica mainly uses water for cooling condensers during power generation. We withdraw fresh water primarily from rivers and aquifers.
2. Cogeneration asset: The ACT plant is an efficient natural gas cogeneration facility with a rated capacity of approximately 300 MW and between 550 and 800 metric tons per hour of steam. ACT produces electrical energy and steam requested Pemex, the client, based on the expected levels of efficiency. The water necessary to operate the plant is withdrawn and supplied by Pemex. The water received is transformed to high pressure steam through heat recovery steam generators and delivered back to Pemex.

In 2020, we withdrew 10.5 million cubic meters of water at our renewable energy assets and we returned 2.1 million cubic meters (20%) back to the source, which represents a reduction of the water used in our operations compared to the previous year. In 2019, we withdrew 11.0 million cubic meters of water and returned 1.9 million cubic meters (17%) back to the source.

Independent external laboratories regularly test the quality of the water returned to the environment. The 10.5 million cubic meters represents 49% of the limits allowed by our water permits. The difference between the water permit limits and actual water withdrawn represents water savings.

Also in 2020, Pemex withdrew and supplied 5.5 million cubic meters of surface water to ACT. In 2019, Pemex withdrew and supplied 4.3 million cubic meters of surface water. In both years, water received was transformed to high pressure steam through heat recovery steam generators and delivered back to Pemex. Water withdrawn was 1.2 million cubic meters lower in 2019 because of ACT's major overhaul, which resulted in lower production and water withdrawal. In contrast, water withdrawal in relative terms (m3 per MWh) was higher in 2019. This was mainly because of the major overhaul, which had a higher impact on production than on water intake.

Detailed information on Water Management is disclosed in our 2020 ESG Report

(section 2.4, page 40), publicly available at  
[https://www.atlantica.com/wpcontent/uploads/documents/2020\\_ESG\\_Report.pdf](https://www.atlantica.com/wpcontent/uploads/documents/2020_ESG_Report.pdf)

---

**Description**

Other, please specify  
Water withdrawal for water desalination

**Metric value**

2.29

**Metric numerator**

cubic meters of water withdrawn

**Metric denominator (intensity metric only)**

Hm3 produced

**% change from previous year**

1.26

**Direction of change**

Increased

**Please explain**

We generate drinking water for local communities and industries through the desalination of sea water.

In 2020 our water segment included three water desalination plants, compared to two in 2019 and 2018. We withdraw sea water for desalination as specified in the concession agreements for our three water desalination plants.

Our water desalination activity in these areas plays a key social role since our plants are the only source of drinking water for approximately 3 million people in the communities where the assets are located.

In 2020, we withdrew 330.3 million cubic meters of sea water, from which we removed salt and minerals during the desalination process at our water treatment facilities to prepare it for human consumption. We produced 144.2 million cubic meters of desalinated water and returned 185.9 million cubic meters (56%) back to the sea. The difference between water withdrawn from and returned to the sea is the desalinated potable water delivered to the water utility, as specified by our take-or-pay concession agreements.

Detailed information on our Water Management is disclosed in our 2020 ESG Report (section 2.4, page 40).



**Description**

Other, please specify  
Water discharges for power generation

**Metric value**

0.21

**Metric numerator**

Cubic meters of water discharged (m3)

**Metric denominator (intensity metric only)**

MWh generated

**% change from previous year**

1.23

**Direction of change**

Increased

**Please explain**

Water discharges for power generation was 0.211 m3 per MWh in 2020 and 0.208 m3 per MWh in 2019. No significant changes.

In 2020, we analyzed water consumption reduction initiatives including the use of recycled water in the mirror cleaning process at our solar assets. We plan to finalize the analysis in 2021.

Please see the water withdrawal for power generation section. Additional detailed information on our Water Management is disclosed in our 2020 ESG Report (section 2.4, page 40).

---

**Description**

Other, please specify  
Water discharges for water desalination

**Metric value**

1.29

**Metric numerator**

cubic meters of water discharged

**Metric denominator (intensity metric only)**

Hm3 produced

**% change from previous year**

2.25

**Direction of change**

Increased

**Please explain**

In 2020 our water segment included three water desalination plants, compared to two in 2019 and 2018. We withdraw sea water for desalination as specified in the concession agreements for our three water desalination plants.

The non-significant difference is due to the adherence to our portfolio of a new water desalination plant.

Please see the water withdrawal for water desalination section. Additional detailed information on our Water Management is disclosed in our 2020 ESG Report (section 2.4, page 40).

---

**Description**

Waste

**Metric value**

2,680

**Metric numerator**

tons of hazardous waste

**Metric denominator (intensity metric only)**

not applicable

**% change from previous year**

75

**Direction of change**

Decreased

**Please explain**

In 2020, hazardous waste was considerably lower than in 2019, mainly because of the measures implemented to control hazardous waste generation at some of our plants. In 2019, an environmental accident at one of our assets in Spain was the main reason of the amount of hazardous waste generated being higher compared to the following year. We undertook all necessary measures to minimize its impact, informed the public authorities, performed a root-cause analysis, implemented corrective actions to remediate contaminated soils, thus reducing the impact, and internally shared the lessons learnt.

In 2020, we reused or recycled 55% of the total hazardous waste generated and disposed of the remaining 45% in landfills. Reusability and recycling initiatives significantly reduced our generated hazardous waste. In 2019, we reused or recycled 12% of the total hazardous waste generated and disposed of the remaining 88% in landfills.

Detailed information on our Waste Management is disclosed in our 2020 ESG Report (section 2.5, page 46), publicly available at [https://www.atlantica.com/wp-content/uploads/documents/2020\\_ESG\\_Report.pdf](https://www.atlantica.com/wp-content/uploads/documents/2020_ESG_Report.pdf)

**Description**

Waste

**Metric value**

20,532

**Metric numerator**

tons of non-hazardous waste

**Metric denominator (intensity metric only)**

non applicable

**% change from previous year**

4

**Direction of change**

Increased

**Please explain**

Non-hazardous waste concerns the wastewater treatment plants and the reuse of wastewater before discharge. In 2020, non-hazardous waste increased by 3.5% vs. 2019 mainly because of non-contaminated soil generated by our water ponds.

In 2020, we reused or recycled 61% of the total non-hazardous waste generated and disposed of the remaining 39% in landfills, compared to 68% and 32% respectively in 2019. The reuse or recycling percentage decrease was due to non-hazardous waste generated at Solana, where our filter cake composter notified us that he could not take additional material. We have reverted back to landfilling, but we are actively seeking new partners to take this material.

Detailed information on our Waste Management is disclosed in our 2020 ESG Report (section 2.5, page 46).

## C-EU9.5a

**(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.**

Primary power generation source	CAPEX planned for power generation	Percentage of total CAPEX planned for	End year of CAPEX plan	Comment

	from this source	power generation		
Solar	1,668,533	6	2021	Our capex plan is achieved mainly through acquisitions or investments in new assets or businesses. Our maintenance capex is not significant since most of the maintenance capex costs are included in our operation and maintenance agreements and recorded as operating expenses. 2021 capex investment in solar power assets mainly relate to pond netting, pumps and solar field components.
Gas	473,941	2	2021	Our capex plan is achieved mainly through acquisitions or investments in new assets or businesses. Our maintenance capex is not significant since most of the maintenance capex costs are included in our operation and maintenance agreements and recorded as operating expenses.
Hydropower	42,480	0	2021	Our capex plan is achieved mainly through acquisitions or investments in new assets or businesses. Our maintenance capex is not significant since most of the maintenance capex costs are included in our operation and maintenance agreements and recorded as operating expenses.
Other, please specify Storage system	25,673,928	92	2021	This capex corresponds to the replacements made in the storage system from one of or solar assets in the U.S.

## C-EU9.5b

**(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).**

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
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Other, please specify Renewable energy assets	The capex represents the improvements we planned for 2021 at our renewable energy assets to increase production, reduce costs or improve operations.	1,711,013	100	2021
Other, please specify Transmission lines	The capex represents the improvements we planned for 2021 at our transmission line assets to reduce costs or improve operations.	4,262,514	100	2021
Other, please specify Water assets	The capex represents the improvements we planned for 2021 at our water assets to increase production, reduce costs or improve operations.	1,208,217	100	2021
Other, please specify Efficient natural gas assets	The capex represents the improvements we planned for 2021 at our efficient natural gas assets to increase production, reduce costs or improve operations.	473,941	100	2021
Other, please specify Storage system	This CAPEX corresponds to the replacements made in the storage system from one of or solar assets in the U.S.	25,673,928	100	2021

## C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Our business model relies on using third party proven technologies at our assets and we therefore do not invest significant amounts on Research and Development. Nevertheless, we do work on certain innovative technologies that can help us to better manage our assets and maximize their value. We have an in-house Advanced Analytics team to improve the performance of our existing technologies, including enhanced monitoring and predictive capabilities. In addition, our Operations Department dedicates time and

		<p>efforts to identify potential measures to improve efficiency at our assets.</p> <p>In addition, we have joint-collaboration agreements in-place with certain key suppliers and universities in order to develop intelligent infrastructure initiatives to improve asset performance. We aim to reduce operational risks and increase critical equipment uptime and efficiency.</p> <p>We do not consider our Advanced Analytics team activities as Research and Development spending as these are activities that do not imply among other, new patents. We post all related spending in our Income Statement.</p>
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### C-CO9.6a/C-EU9.6a/C-OG9.6a

**(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.**

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Digital technology	Applied research and development	≤20%		<p>The advanced analytics team is working with suppliers on strengthening our big data and artificial intelligence capabilities, and on improving our real-time predictive maintenance through inspection measurements and quality control tests. This involves among other, the use of: (1) fixed cameras, (2) online smart glasses and (3) drones. An upgraded inspection system should help us to predict equipment failure and minimize unexpected incidents, reduce our operations and maintenance costs over time.</p> <p>The cost is included in our general and administrative expenses and corresponds to the costs of our Advanced Analytics department.</p>
Steam turbine and/or other	Pilot demonstration	≤20%		Our corporate operations department is working with suppliers on the development of

component upgrades			<p>optimized solar field components and testing them on a test bench. Our goal is to reduce our operational risks and to improve critical equipment uptime and efficiency. Solar field optimized components should minimize unexpected incidents and downtimes, and to improve asset performance, hence reduce our operations and maintenance costs over time by reducing our solar field unavailability.</p> <p>The cost is included in our general and administrative expenses and corresponds to the costs of our Operations, Health and Safety, and Quality and Environment department.</p>
Renewable energy	Applied research and development	≤20%	<p>Our corporate operations Department is working with several universities on analyzing overheating and angular displacement of solar field collectors. Our goal is to reduce potential future operational risks and improve critical equipment uptime and efficiency.</p> <p>The cost is included in our general and administrative expenses and corresponds to the costs of our Operations, Health and Safety, and Quality and Environment department.</p>
Digital technology	Applied research and development	≤20%	<p>The Advanced Analytics team for machine learning and predictive maintenance worked with Sulzer, a global leader in fluid engineering, in the deployment of Sulzer's BLUE BOX, an advanced analytic solution on operational performance of critical pumps. Several pilot programs were</p>

				<p>developed at two of Atlantica's solar power plants.</p> <p>As proof of success, in 2020 Atlantica received the "Pump Industry Excellence Award for Innovation and Technology" from the Hydraulic Institute, the largest association of pump industry manufacturers in North America. We were recognized for the deployment of Sulzer's BLUE BOX, which enabled us to reduce our operational risks and to improve critical pumps uptime and efficiency going forward.</p>
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## C10. Verification

### C10.1

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

### C10.1a

**(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.**

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**



 Verification Report AENOR\_Scope\_1.pdf

**Page/ section reference**

Pages 2-3. Total Scope 1 verified emissions by AENOR amount to 9,374tCO<sub>2</sub>e (0.5% of our scope 1 emissions).

In 2020, Atlantica's complete GHG emissions inventory was externally verified. In Spain, our Scope 1 GHG emissions were verified by AENOR (attached in this section), a not-for-profit entity that fosters standardization and certification across industrial and service sectors. The rest of our GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management

**Relevant standard**

European Union Emissions Trading System (EU ETS)

**Proportion of reported emissions verified (%)**

1

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**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/ section reference**

Page 3. Total Scope 1 verified emissions by DNV amount to 10,489 tCO<sub>2</sub>e (0.6% of our scope 1 emissions).

In 2020, Atlantica's complete GHG emissions inventory was externally verified. In Spain, our Scope 1 GHG emissions were verified by AENOR, a not-for-profit entity that fosters standardization and certification across industrial and service sectors. The rest of our GHG emissions inventory was verified by DNV GL (attached in this section), an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

1

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 Verification Report\_ANCE\_Scope\_1\_2.pdf

**Page/ section reference**

Page 1.

Total Scope 1 verified emissions by ANCE amount to 1,717,254 tCO<sub>2</sub>e. This represents 98.9% of Atlantica's scope 1 emissions.

In Mexico, our Scope 1 and 2 greenhouse emissions were verified by ANCE, a leading certification association across industries in Mexico.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

98

## C10.1b

**(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.**

---

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/ section reference**

Page 3.

Total Scope 2 verified emissions by DNV GL amount to 199,197 tCO<sub>2</sub>e (100% of our scope 2 emissions).

In 2020, Atlantica's complete GHG emissions inventory was externally verified. Scope 2 GHG emissions were verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 Verification Report\_ANCE\_Scope\_1\_2.pdf

**Page/ section reference**

Page 1.

Total Scope 2 verified emissions by ANCE amount to 0.92 tCO<sub>2</sub>e. This represents 0.0% of Atlantica's scope 2 emissions.

In Mexico, our Scope 1 and 2 greenhouse emissions were verified by ANCE, a leading certification association across industries in Mexico.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

0

## C10.1c

**(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

**Scope 3 category**

Scope 3: Purchased goods and services

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total purchased and good services Scope 3 verified emissions by DNV GL amount to 52,856 tCO<sub>2</sub>e. This represents 6.4% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

6

---

**Scope 3 category**

Scope 3: Capital goods

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total capital goods Scope 3 verified emissions by DNV GL amount to 1,990 tCO<sub>2</sub>e. This

represents 0.2% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

0

**Scope 3 category**

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total Fuel-and-energy-related activities Scope 3 verified emissions by DNV GL amount to 662,876 tCO<sub>2</sub>e. This represents 80.8% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

81

**Scope 3 category**

Scope 3: Upstream transportation and distribution

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total Upstream transportation and distribution Scope 3 verified emissions by DNV GL amount to 44 tCO<sub>2</sub>e. This represents 0.01% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

0

**Scope 3 category**

Scope 3: Waste generated in operations

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total Waste generated in operations Scope 3 verified emissions by DNV GL amount to 919 tCO<sub>2</sub>e. This represents 0.11% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

0

---

**Scope 3 category**

Scope 3: Business travel

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total Business travel Scope 3 verified emissions by DNV GL amount to 997 tCO<sub>2</sub>e. This represents 0.1% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

0

---

**Scope 3 category**

Scope 3: Employee commuting

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total Employee commuting Scope 3 verified emissions by DNV GL amount to 153 tCO<sub>2</sub>e. This represents 0.02% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

0

---

**Scope 3 category**

Scope 3: Upstream leased assets

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total Upstream leased assets Scope 3 verified emissions by DNV GL amount to 5,670 tCO<sub>2</sub>e. This represents 0.7% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

1

---

**Scope 3 category**

Scope 3: Investments

**Verification or assurance cycle in place**



Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification Report DNV\_Scope\_1\_2\_3.pdf

**Page/section reference**

Pages 3 and 5.

Total Investments Scope 3 verified emissions by DNV GL amount to 95,220 tCO<sub>2</sub>e. This represents 11.6% of Atlantica's scope 3 emissions.

In 2020, all our scope 3 GHG emissions inventory was verified by DNV GL, an independent expert in assurance and risk management.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

12

## C10.2

**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

No, we do not verify any other climate-related information reported in our CDP disclosure

## C11. Carbon pricing

### C11.1

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

### C11.1a

**(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

EU ETS

## C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

### EU ETS

---

**% of Scope 1 emissions covered by the ETS**

0

**% of Scope 2 emissions covered by the ETS**

0

**Period start date**

January 1, 2020

**Period end date**

December 31, 2020

**Allowances allocated**

9,374

**Allowances purchased**

9,523

**Verified Scope 1 emissions in metric tons CO<sub>2</sub>e**

9,374

**Verified Scope 2 emissions in metric tons CO<sub>2</sub>e**

0

**Details of ownership**

Facilities we own and operate

**Comment**

We own and operate assets in Spain. The assets under the EU Emissions Trading System (EU ETS) include PS20, Solnova1/3/4, Helioenergy 1/2, Solacor1/2, Helios1/2, and Solaben1/2/3/6. All of our assets, including those under the EU ETS, are subject to strict and comprehensive GHG emissions control. Each asset has its own documentation related to the: (1) methodology used to calculate the GHG emissions (i.e., based on the "Corporate Accounting and Reporting Standard (revised edition)" issued by the GHG Protocol), and (2) activities that have contributed to the generation of GHG emissions, including data and system controls in-place.

According to European and Spanish GHG legal requirements, our assets subject to EU ETS do not receive emission rights free of charge and must purchase rights in the market (via public auctions). Atlantica, as an asset owner, is also responsible for the GHG emissions accounting and control, and must comply with the requirements established by the Greenhouse Gas Emissions Authority in Spain (AEGEI).

Available EUA ETS from previous year: 140 tons of CO<sub>2</sub>.  
2020 allowances purchased: 9,523 tons of CO<sub>2</sub>.  
2020 allowances allocated and verified: 9,374 tons of CO<sub>2</sub>.  
Available EUA ETS: 289 tons of CO<sub>2</sub> (140 TCO<sub>2</sub> + 9,523TCO<sub>2</sub> – 9,374TCO<sub>2</sub>).

## C11.1d

### **(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?**

Regulation applicable to our assets in Spain:

The EU ETS is a cornerstone of the EU's policy to combat climate change and it is a key tool for reducing greenhouse gas emissions cost-effectively. The EU ETS was set up in 2005, it is the world's first major carbon market and remains the biggest one.

The EU ETS works on the "cap and trade" principle. Within the cap, companies buy emission allowances which they can trade with one another as needed.

On 14 July 2021, the European Commission adopted a series of legislative proposals setting out how it intends to achieve climate neutrality in the EU by 2050, including the intermediate target of an at least 55% net reduction in greenhouse gas emissions by 2030. The package proposes to revise several pieces of EU climate legislation, including the EU ETS, Effort Sharing Regulation, transport and land use legislation, setting out in real terms the ways in which the Commission intends to reach EU climate targets under the European Green Deal.

At Atlantica, we own and operate assets in Spain. All of our assets, including those under the EU ETS, are subject to strict and comprehensive GHG emissions control. According to EU ETS regulation, our assets in Spain do not receive emission rights free of charge and must purchase rights in the emissions rights market via public auctions.

In addition, Atlantica complies with the AEGEI (Greenhouse Gas Emissions Authority in Spain). The AEGEI sets strict and comprehensive accounting and controls over the emissions rights of each asset. All of our assets, including those in Spain, have their own documentation related to the: (1) methodology used to calculate the GHG emissions and (2) activities that have contributed to the generation of GHG emissions, in compliance with all rules and authorizations.

Atlantica performs internal audits to verify that GHG emissions calculations have been carried out according to the procedures and authorizations as set by the AEGEI. In addition, an external auditor (AENOR) carries out the official verification of our GHG emissions (Scope 1) in compliance with the EU ETS requirements. The reports of these verifications are sent to the environmental authority before the 28th of February of each year. Before the end of April, each asset must purchase emissions allowances to be sent to RENADE (the National Registry for Greenhouse Gas Emission Allowances in Spain).

For example, this year the allowances allocated and verified amounted to 9,374 tons of CO<sub>2</sub>e.

Regulation applicable to our assets in Mexico:

In Mexico, GHG emissions generated by our 300 MW plant (ACT) are subject to Mexican regulation. However, under the local regulation, the emissions are audited and controlled as emissions of Pemex, our offtaker for whom ACT generates electricity and steam under a tolling agreement. We report the emissions to Pemex who in turn consolidates them and gets them audited and reported to the local regulator. The documentation and responsibility of these emissions is furnished under Pemex not Atlantica.

Lastly, as part of our commitment to sustainability, we regularly analyze initiatives to mitigate our GHG emissions. As a result, in 2020 we offset 200,000 tons of Scope 1 CO<sub>2</sub> emissions through Voluntary Carbon Credits, reducing our total GHG emissions by 7%, and our scope 1 GHG emissions by 12%. This is disclosed in section C11.2.

## C11.2

**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

Yes

### C11.2a

**(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.**

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Wind

**Project identification**

Wind assets in Uruguay

**Verified to which standard**

VCS (Verified Carbon Standard)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

200,000

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

200,000

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Solar

**Project identification**

Solar assets in Spain

**Verified to which standard**

JI (Joint Implementation)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

9,374

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

9,374

**Credits cancelled**

Not relevant

**Purpose, e.g. compliance**

Compliance

---

**Credit origination or credit purchase**

Credit origination

**Project type**

Wind

**Project identification**

Cadonal

**Verified to which standard**

VCS (Verified Carbon Standard)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

477,296

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

477,296

**Credits cancelled**

No

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit origination

**Project type**

Wind

**Project identification**

Palmatir

**Verified to which standard**

VCS (Verified Carbon Standard)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

148,644

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

148,644

**Credits cancelled**

No

**Purpose, e.g. compliance**

Voluntary Offsetting

## **C11.3**

**(C11.3) Does your organization use an internal price on carbon?**

Yes

## **C11.3a**

**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

---

**Objective for implementing an internal carbon price**

Navigate GHG regulations  
Drive energy efficiency  
Drive low-carbon investment  
Stress test investments

**GHG Scope**

Scope 1

**Application**

We apply a carbon price when we evaluate investment in assets with long-term useful life. Depending on its risk level, the scenario posed by the carbon price can be accepted, mitigated, transferred or avoided.

**Actual price(s) used (Currency /metric ton)**

27

**Variance of price(s) used**

\$20-\$35 per ton of CO<sub>2</sub>.

Price evolving with time, according with estimations in Europe, North America and South America.

**Type of internal carbon price**

Shadow price

**Impact & implication**

We apply a carbon price when we evaluate investments in assets with long-term useful life. The economic impact is evaluated as an additional cost.

At Atlantica, when we analyze potential investments in natural gas, we always use carbon pricing for GHG emissions. In 2021, we updated our carbon price to approximately \$20-\$35 per ton of CO<sub>2</sub>, compared to \$15-\$25 per ton of CO<sub>2</sub> in 2020.

When the carbon pricing cost has been factored in the investment opportunity model, the Investment Committee has decided that the potential investment was not reaching the minimum returns required for the specific sector and geography, hence rejecting any potential investment. Other investment opportunities where we could have decided to move forward in the process have been discarded after applying the internal carbon price.

This shadow price encourages investments in low carbon footprint assets, in line with our commitments to (i) reducing our emission rate per unit of energy generated by 70% by 2035 (vs. the 2020 base year), and (ii) maintaining over 80% of our Adjusted EBITDA including unconsolidated affiliates generated by low carbon footprint assets, including renewable energy assets, transmission infrastructure and water plants.

## C12. Engagement

### C12.1

**(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our suppliers

Yes, other partners in the value chain

### C12.1a

**(C12.1a) Provide details of your climate-related supplier engagement strategy.**

---

### **Type of engagement**

Information collection (understanding supplier behavior)

### **Details of engagement**

Collect climate change and carbon information at least annually from suppliers

### **% of suppliers by number**

31

### **% total procurement spend (direct and indirect)**

74

### **% of supplier-related Scope 3 emissions as reported in C6.5**

1

### **Rationale for the coverage of your engagement**

The coverage of our engagement with these suppliers is based in a three step process that we carry out to analyze and monitor all our current and potential suppliers. The three step process is the following:

a) Internal approval process. Atlantica's internal team verifies i) the supplier's bank account certificates and taxpayer identification number, ii) that it does not have conflicts of interests with Atlantica, iii) it does not have corruption or bribery accusations, iv) its compliance with environmental management systems, v) financial solvency (reviewed for vendors above a certain threshold).

b) External approval process. We engage the services of the external provider Ecovadis to evaluate our key suppliers in terms of: i) environment, ii) fair labor and human rights, iii) ethics, and iv) sustainable procurement. Ecovadis applies an in-house methodology built on international Corporate Social Responsibility (CSR) standards including the Global Reporting Initiative, the United Nations Global Compact, and ISO 26000 and issues a rating per supplier. In particular, the questionnaire specifically rates environmental policies and KPIs, responses to CDP's Climate Change questionnaire, measures to reduce energy consumption, GHG emissions and disclosure, and waste management.

The external approval process includes:

- A scorecard per supplier with a zero to one hundred (0 – 100) score, and medals (bronze, silver, gold) when applicable. The scorecards also provide guidance on strengths and improvement areas for each supplier.
- Engagement with suppliers to determine appropriate action on improvement areas (if necessary).
- Since Ecovadis rating is valid for one year, we regularly monitor suppliers' progress.

c) Annual supplier evaluation. The compliance team monitors our key suppliers' activities to verify that they continue to operate under the principles set out in our Supplier Code of Conduct. An objective and systematic analysis is performed to analyze the continuation of the contractual relationship. Non-compliance may result in terminating, suspending, or revoking the contract. The Internal Audit department and the



Operations, Health and Safety, Environmental and Quality departments also participate in the annual supplier evaluation assessment.

### **Impact of engagement, including measures of success**

In 2020, three suppliers were disqualified by Atlantica (vs. none in 2019). We externally pre-screened suppliers representing over 51% of the Company's annual operating expenses. We believe that certifying over 50% of the company's annual operating expense is a measure of success for this engagement. In 2020, we also started performing an annual supplier evaluation assessment. We verified 20% of the company's total purchases. We plan to continue to improve our suppliers' engagement until we accomplish supply chain targets detailed later in this section.

In 2020, we revised our objectives and set the following supply-chain management targets:

- Pre-screening: Internally verify 100% of total annual costs (i.e., all Tier 1 suppliers).
- Pre-screening: Externally verify 65% of total annual costs (i.e., all Tier 1 suppliers). We expect to achieve this target in 2022.
- Annual supplier evaluation assessment: Verify at least 65% of critical Tier 1 suppliers' annual costs. We expect to achieve this target in 2022.

In addition we engage the services of the external provider Ecovadis to evaluate our key suppliers in terms of environment ( including climate - related issues), fair labor and human rights, ethics, and sustainable procurement. Ecovadis applies an in-house methodology built on international Corporate Social Responsibility (CSR) standards including the Global Reporting Initiative, the United Nations Global Compact, and the ISO 26000 and issues a rating per supplier. The questionnaire specifically asks questions on environmental policies, environmental KPIs, response to CDP's Climate Change questionnaire, measures to reduce energy consumption and GHG emissions, waste management and GHG disclosures, etc.

In our internal verification process we also analyze our suppliers environmental disclosure and monitor that our suppliers environment KPI's are aligned with those from Atlantica.

### **Comment**

-

---

### **Type of engagement**

Compliance & onboarding

### **Details of engagement**

Included climate change in supplier selection / management mechanism

Climate change is integrated into supplier evaluation processes

Other, please specify

Adherence to Atlantica's Supplier Code of Conduct

**% of suppliers by number**

100

**% total procurement spend (direct and indirect)**

100

**% of supplier-related Scope 3 emissions as reported in C6.5**

100

**Rationale for the coverage of your engagement**

According to our Code of Conduct, we seek to work with third parties who operate under high ethical principles, and we have a Suppliers' Code of Conduct. Atlantica's purchasing requirements establish some principles for all external companies in order to become its suppliers. All suppliers adhere to our Suppliers Code of Conduct (available at our website [www.atlantica.com](http://www.atlantica.com)). We include our requirements in our contractual arrangements with suppliers that are similar to those set in the Code of Conduct.

**Impact of engagement, including measures of success**

100% of suppliers' registrations in the company's procurement system have accepted our Suppliers Code of Conduct. We have smaller suppliers who are working to fully comply with our Code. We measure the success of this engagement through the involvement in the initiative: We consider a success that nearly 100% of our suppliers accepted our Suppliers Code of Conduct in 2020 and 0 contracts were cancelled due to non-compliance.

**Comment**

-

## C12.1d

**(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

Banks and Sources of Liquidity:

In 2020 Atlantica developed a Green Finance Framework to issue green finance instruments to finance or refinance renewable energy infrastructure, as well as transmission lines dedicated to bringing renewable energy to the grid. Over the past twelve months we have been able to leverage our positioning in ESG and climate change to close over \$1billion in new green financing. This includes project and corporate debt that complies with all Green Bond and Loan Principles. We have worked with several banking sector and capital markets entities to make this possible. We are pleased to see that the financial industry is actively promoting ESG development by allocating credits to sustainable projects and companies.

Banks and Sources of Liquidity case study:

Situation: Sustainability has been a core part of our DNA since our incorporation. Our strategy focuses on climate change solutions in the power and water sectors. Growth initiatives over time will require us to access the capital markets, issuing either debt or

equity. Access to capital is an important part of our growth strategy and our plan of investments.

Task: Finance our growth initiatives while promoting and maintaining a good reputation among all our stakeholders.

Action: The finance committee requested the Head of ESG to prepare all the necessary documentation to issue green financing (i.e., green bonds and loans) to increase access to capital. The Head of ESG launched a 3-step process that consisted of: (1) Preparing a green finance framework aligned with the Green Bond Principles and the Green Loan Principles, (2) hiring Sustainalytics to issue a Second Party Opinion on the green finance framework, and (3) issuing a green finance report.

Result: In 2020, we developed a Green Finance Framework to issue green finance instruments to finance or refinance renewable energy infrastructure, as well as transmission lines dedicated to bringing renewable energy to the grid. The Framework is aligned with our strategy and the use of proceeds will contribute to the advancement of the UN SDGs of Affordable and Clean Energy. The framework has a Second Party Opinion (SPO) delivered by Sustainalytics. In April 2021, following the Green Finance Framework reporting requirements, we published a Green Finance Report on our website disclosing the disbursement of funds to eligible green projects. In the last 12 months we have leveraged our positioning in ESG to close approximately \$1 billion in new green financing. All the documentation is publicly available on our website (<https://www.atlantica.com/web/en/investors/green-financing/>).

Local Communicates:

We acknowledge that our day-to-day activities have impacts on nearby communities. We recognize that the communities where we operate are where some of our employees and other stakeholders live and raise their families, and where part of our future workforce is educated and trained. We foster communities' economic prosperity through local purchasing and hiring of local employees. As such, it is key for us to be both proactive and a valued member of our communities. In 2020, we issued a new Stakeholder Policy following our long-term strategy and updated our Community Investment and Development Policy to better reflect our commitment to local communities.

Each geography has its own procedures and consultation guidelines in place to speak with community leaders and identify local needs (including climate change related matters). A proactive approach and scheduled activities undertaken by our local employees to efficiently identify and manage local stakeholders and communities of interest is key to the success of our relationship with local communities. Our Geographic VPs hold full responsibility over assets they manage, including ESG and climate change related matters such as acute, physical and/or regulatory risks. They are also responsible for community relations and monitoring community development programs. Monitoring KPIs includes quantitative and qualitative analysis.

## C12.3

**(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

Trade associations

## C12.3b

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

## C12.3c

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

---

### Trade association

Atlantica is one of the four Vice-presidents of Protermosolar and is a member of the Executive Committee.

Protermosolar is the Spanish CSP industry association that supports renewable energy and particularly, promotes CSP energy in Spain. This Association has more than 50 members and sits at the Executive Committee of Estela, the European CSP association. Protermosolar aims to promote CSP energy within a stable regulatory framework. It intends to support technology development and collaborate with state and central government to obtain efficient support programs. This association promotes the macroeconomic advantages that the use of this kind of technology has in the society and how this technology contributes to combat climate change.

### Is your position on climate change consistent with theirs?

Consistent

### Please explain the trade association's position

The main objectives of Protermosolar, besides the defense of the interest of its associated members on regulatory issues, are:

- To promote the deployment of CSP plants in Spain, informing policy makers of the advantages of dispatchability and thermal storage as the most current feasible way to reduce the need of fossil fuel backup.
- To increase the support of research and development programs of Public Administrations at regional, national and European level and to orientate the application of resources towards an efficient use of public funding.
- To disseminate knowledge and best practices and the strong advantages to contribute to mitigate to climate change objectives.

### How have you influenced, or are you attempting to influence their position?

One of Atlantica's core values is Sustainability. Atlantica, as a member of Protermosolar's executive committee has a relevant role on the definition of the strategy and activities of the Association.

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**Trade association**

ESTELA is the European Mediterranean CSP Industry Association.

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

ESTELA is the counterpart of the EU Commission and Parliament in discussion and elaboration of Energy and R&D policies regarding Renewables. ESTELA is a highly recognized stakeholder of the International Energy Agency - being member of its Renewable Industry Advisory Board and strong partner in the SolarPACES Implementing Agreement. ESTELA's opinions are also requested by other organizations such as IRENA, REN21, World Bank, and many policy makers of the Sunbelt countries around the Globe.

**How have you influenced, or are you attempting to influence their position?**

Protermosolar is a founding member of ESTELA and one of the most active members within its Executive Committee. Atlantica has, therefore, an influential position through Protermosolar in the activities of ESTELA.

---

**Trade association**

Uruguayan Association of Electric Energy Generation

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

This Association contributes to the energy diversification of Uruguay and we work to promote the development of renewable energy.

**How have you influenced, or are you attempting to influence their position?**

We are a member of the association and actively participate in decision-making processes. However, we are not a member of the Association's Board.

**C12.3f**

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Atlantica has management policies and internal procedures in place to ensure that all activities that influence policy are consistent with its climate change strategy.

The corporate principles that Atlantica adopts with respect to climate change are applicable to all of our businesses and countries where we are present.

Atlantica ensures that the entire management team, including VPs and the ESG, Operations, Compliance and Risks departments are fully aligned with activities and initiatives related to climate change. This is done through geographic and corporate committees where the CEO (who is also a Director of the Board) is a member. ESG and climate change related topics are discussed at our Management Meetings regularly. In addition, the top management of the company, including our Geographic VPs, are members of the ESG Committee. All activities that may influence our policies require an authorization that has to be approved at several levels, ensuring that these activities will be aligned with the Company's strategy with respect to climate change.

ESG issues (including climate-related issues) are included periodically in the agenda of Board meetings. The Board of Directors is the highest level of responsibility for climate change since is the ultimate decision-making body, including the oversight of climate-related risks and opportunities.

Key ESG and climate change related functions include:

- The CEO, in his executive role and as Director of the Board, manages, supervises and has a leading position and responsibility over climate-related issues, including submitting the following actions for Board approval: (1) raising sustainability and ESG policies and targets for approval, including those related to climate change, (2) setting goals for climate-related issues, submitting those goals to the board for approval, and monitoring and overseeing progress in line with such objectives, (3) regularly reviewing climate related risks and opportunities.
- Geographic VPs: Hold full responsibility over assets they manage, including ESG and climate change related issues such as acute, physical and/or regulatory risks.
- The Head of Operations: Responsible for all environmental and operations aspects across assets, including improving asset performance, KPI monitoring regular environmental and operational audits, analyzing measures to reduce environmental impacts, and implementing best practices.
- The Head of Internal Audit and Risk participates in identifying and monitoring climate change risks with the Geographic VPs. In addition, he prepares and agrees with VPs and the CEO the risk map including climate change risks. The Head of Internal Audit and Risk reports to the Audit Committee.
- The Head of ESG: Identifies sustainability best practices, proposes actions to the CEO, geographic VPs and ESG Committee and monitors the implementation of approved proposals.

Atlantica has integrated ESG and climate change into its businesses via policy making, ESG planning, risk management, KPI setting and tracking. At the management level, we have assembled committees with different responsibilities based on Atlantica's priorities.

These committees are led by senior management members with diverse perspectives and experiences to efficiently and effectively address ESG, including climate change related issues, risks and opportunities. Some examples include:

- ESG Committee. Key functions include: (i) providing visibility on ESG, climate change and operation and maintenance issues enabling, prioritization and immediate action (if deemed necessary), (ii) setting targets and measures for environmental protection and GHG emission reductions, (iii) reviewing key health and safety and environmental KPIs as well as best practices, lessons learnt and implementation progress in relation to audit recommendations.
- Investment Committee. Key functions include analyzing potential growth opportunities considering: (1) impacts on our climate-related commitments and targets, (2) ESG and climate change risks in due diligence analysis, and (3) carbon pricing to evaluate investment opportunities.

We have set a new GHG emissions target, consisting of reducing a 70% Atlantica's emission rate per unit of energy generated by 2035 versus the 2020 base year. We are also committed to ensuring that over 80% of our adjusted EBITDA, including unconsolidated affiliates, continue to be generated from low-carbon footprint assets such as renewable energy, storage, transmission infrastructure and water assets. These climate change related targets are considered in our investment opportunities.

We have also implemented new lines of defense to mitigate risks from our supply chain, including climate change related risks.

Our senior management team takes part in our "Atlantica's Management Model" training to discuss our long-term strategy (including ESG and climate-related issues), recent milestones, and growth strategy and values and policies and procedures with all employees.

## C12.4

**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

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### Publication

In voluntary sustainability report

### Status

Complete

### Attach the document

 2020 ESG Report.pdf

### Page/Section reference

Message from the CEO  
Section 1.1 Atlantica in Two Minutes (page 5)  
Section 1.2 About this Report (p. 7)  
Section 1.3 Our Business Model and Strategy (p. 11)  
Section 1.4 Key Business Highlights (p. 18)  
Section 2.1 Environment (p. 24)  
Section 2.2 Task Force on Climate-Related Financial Disclosure (p. 26)  
Section 2.3 Greenhouse Gas Emissions (p. 35)  
Section 3.3 Supply Chain Management (p. 62)  
Section 4.2 Sustainability Governance (p. 96)  
Appendix A Global Reporting Initiative (GRI) standards

### Content elements

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets

### Comment

2020 ESG Report

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### Publication

In mainstream reports

### Status

Complete

### Attach the document

 Atlantica 2020 UK Annual Report .pdf

### Page/Section reference

Pages: 46,47,53,55, 59-71

### Content elements

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets

### Comment

2020 U.K. Annual Report



**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

 AS-FILED-BRHC10020710-Atlantica-Sustainable-Infrastructure-plc-20-F-Financials.pdf

**Page/Section reference**

Pages: 12-21, 28-35, 45.

**Content elements**

Strategy  
Risks & opportunities

**Comment**

Atlantica Form-20F submitted to the Securities Exchange Commission (SEC)

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**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

 Q4-2020-Earnings-Presentation-2020.pdf

**Page/Section reference**

Slide 11: Focused on ESG Priorities  
Slides 13-17: 2021 Outlook

**Content elements**

Emissions figures  
Emission targets  
Other, please specify  
Climate change related investments

**Comment**

Q4 2020 Earnings Presentation 2020

## C15. Signoff

### C-FI

**(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

Non applicable

### C15.1

**(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Santiago Seage (CEO and Director on Board)	Director on board

## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

**Please confirm below**

I have read and accept the applicable Terms