

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

Our Journey for 1,5oC

We are a 100% renewable electricity generation company, offering resilient, competitive and responsible solutions and customized solutions to meet the different demands and needs of our customers.

For over 20 years, we have promoted the supply of clean energy across the country.

Guided by the goal of being the top-of mind choice for customers in the free market , we have expanded our set of Generation. The Company expects to invest approximately R\$ 3.8 billion in the period from 2022 to 2026, destined to the expansion of projects already contracted and with a defined construction plan.

Our Capacity:

2016: 2.658 MW

2017: + 386 MW (Wind Alto Sertão II) + 144 MW (Solar Ouroeste)

2018: + 150 MW (Solar Guaimbé)

2019: + 322 MW (Wind Tucano)

2020: + 346 MW (Wind- Mandacaru and Salinas and Ventus)

2021: + 479 MW (Cajuína) +216 MW (Remain Lote B)

2022: + 210 MW (Ventos do Araripe) + 182 MW (Caetés) + 64 MW (Cassino)

Total Capacity in 2022: 5.200 MW (51% hydroelectric, 43% wind and 6% solar)

Total Capacity in the Next Years: Total- 6,8 GW (39% hydroelectric, 51% wind and 10% solar)

23% wind and 11,249% solar)

Our Strategy

Resilience- We invest in projects for growth and diversification of the portfolio of generation assets, with sources that complement the seasonality between them (hydropower, wind, and solar). We operate with market intelligence to take advantage of opportunities in energy trading and mitigate risks while optimizing increasing the level of contracting of the generation park.

Competitiveness- The continuous search for greater operational and financial efficiency guarantees our leading role in the free energy market. We work with a focus on the customer to develop tailor-made products and solutions that exceed expectations in the provision of carbon-free energy, 24 hours a day, 7 days a week.

Responsibility- We conduct and develop our business with the aim of promoting positive impacts and avoid or mitigate any negative impacts. With ethics and transparency, our corporate governance and decision-making processes consider the best practices and criteria for the management of social and environmental aspects

2030 ESG Commitments related to our Climate Strategy

Our 2030 ESG Commitments, approved by the Board of Directors, were established at the end of 2021, considering 2020 as the base year.

§ To contribute through the generation of renewable energy so that our customers can prevent the emission of 582,000 tCO₂e per year from 2025.

§ By 2030, to reduce Scope 1 and 2 greenhouse gas emissions by 18% tCO₂e per MWh generated, compared to 2020. In 2022 our intensity emission reached 0,00011 t CO₂/MWh, representing an increase of 139%, compared to the base year. This increase was related to an operational problem, for which AES developed an action plan that will be completed in 2023.

§ To maintain carbono neutral (Scope 1+2 +3). In 2020 and 2021 our Scope 1, 2 and 3 emissions were neutralized by offset program.

§ By 2025, to offset historical emissions since the beginning of AES Brasil's operations (Scope 1+2)

§ By 2030, to increase reforestation by at least 20% in addition to the commitment to recover occupied áreas. In 2022, 243.9 ha were reforested, and, since the beginning of the hydroelectric concessions, 4,937 ha have already been reforested.

External Commitments

- Business Ambition for 1,5°C

- Recover Better

- Sustainable Development Goals: AES Brasil has been a signatory of the Global Compact since 2006 and has its CEO as a spokesperson for SDG 7 in the initiative Leadership with ImPact, in addition to integrating other voluntary commitments.

- Science Based Targets (Metas Baseadas na Ciência): We are already a net-zero company.

Note: The company joined the SBTi, however it was defined, along with SBTi and WRI representative, that the two methods available do not apply to its business model, because the Sectoral Decarbonization Approach is destined to companies that need to decarbonize their electric matrix (which is not the case, because the company is 100% renewable) and the Absolute Contraction Approach method sets the goal in absolute number without considering the growth in MWh for the coming years (AES Brasil is increasing its renewable generation). "The conclusion is that we don't have a good methodology for a 100% renewable energy company at the moment". SBTi and WRI representative in response to AES Brasil request to become a SBTi member.

2022 Highlights

MSCI Rating- AAA- Only energy company in Latin America rated AAA

R\$169.4 million invested in modernization, maintenance, and expansion

R\$6.3 million invested in research & development

R\$2.8 billion in net operating revenue (+13.3% compared to 2021)

US\$ 2.2 million revenue from our first carbon credits sale, originating from the Mandacaru and Salinas Wind Complexes

W-EU0.1a

(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?

Electricity generation

Other, please specify (Commercialization and development of clean energy solutions)

W-EU0.1b

(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each technology.

	Nameplate capacity (MW)	% of total nameplate capacity	Gross electricity generation (GWh)
Coal – hard	0	0	0
Lignite	0	0	0
Oil	0	0	0
Gas	0	0	0
Biomass	0	0	0
Waste (non-biomass)	0	0	0
Nuclear	0	0	0
Fossil-fuel plants fitted with carbon capture and storage	0	0	0
Geothermal	0	0	0
Hydropower	2658	51	8398.6
Wind	2204	43	2315.7
Solar	295	6	593.9
Marine	0	0	0
Other renewable	0	0	0
Other non-renewable	0	0	0
Total	5157	100	11308.2

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1 2022	December 31 2022

W0.3

(W0.3) Select the countries/areas in which you operate.

Brazil

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

BRL

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

No

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	BRAESBACNOR7

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	<p>Direct use refers to the use of good quality water for electricity production. This is classified as vital because 64% of the energy produced by the company was water source. Water availability is influenced by hydrological conditions.</p> <p>In direct operations, the availability of water in sufficient quantity and good quality is vital for the hydroelectric assets (In 2022 64% of gross electricity generation came from this source) and important for the activities in the other generating sources and offices. In the HPPs and SHPs, lower than expected levels of inflow or high levels of river pollution may compromise energy generation, directly impacting AES Brasil's costs and revenues, since this commitment may lead to the need to Purchase energy on the short term market or in the energy reallocation mechanism (MRE) to meet the physical guarantee in the regulated market and the contracts in the free market. In wind and solar complexes, as well as in office activities, water is used for human consumption and cleaning activities and an eventual poor quality condition may lead to increased costs for treatment or purchase from third parties.</p> <p>In indirect operations, the main aspect that causes the classification of water availability in adequate quantity and quality is the shared use of the reservoirs that make up the hydroelectric generating complex. The rivers that enable AES Brasil's hydroelectric generation also supply municipalities in the region for basic sanitation and tourism activities, as well as being a source of abstraction for agricultural producers.</p> <p>In the future, AES Brasil's vision is that dependence in direct operations tends to decrease, since the company has been investing in the diversification of its Generation park in non-hydro renewable sources. For indirect operations, the future trend is to maintain the same level of importance.</p>
Sufficient amounts of recycled, brackish and/or produced water available for use	Not important at all	Not very important	<p>Direct use: AES Brasil rates the importance of direct use as Not important at all because in direct operations, AES Brasil does not use recycled, brackish, and/or produced water. Since 2017, the COGE has had a Biological Effluent Treatment Plant with Water Reuse, but this plant did not operate in 2022 due to low organic load. When operational, this system will allow reused water to be directed to the toilets at COGE. In the HPPs and SHPs, fresh river water passes through the turbines to generate energy and follows the natural course of the river, with no alterations in quality. In the other generating units (wind and solar), since consumption is restricted to auxiliary activities (such as toilets, cleaning, photovoltaic plate washing, and fire fighting), there are no reuse and recirculation mechanisms. These operations generate only biological effluents and in low volume, due to the small number of employees, making the implementation of effluents treatment plant unfeasible. The effluents are sent to septic tanks and, when necessary, an external company is hired to collect and clean the tank.</p> <p>Indirect use: sufficient amount of recycled, brackish and/or produced water available for use by AES Brasil suppliers is rated as not very important, because it is insignificant, and since it is not a material topic, we don't monitor our suppliers' water consumption.</p> <p>In the future, AES Brasil's view is that dependence on this type of water will remain low, except in the case of an extreme water shortage scenario, which could drive the need to expand treatment and recirculation mechanisms. Such a condition is not likely, but it is possible mainly in indirect operations (customers) and the probability of occurrence in the company's direct operations is more remote.</p>

W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Daily	The measurement is made by stations installed in our hydroelectric facilities to measure rainfall and water level in the river, pluviograph and pluviometers installed in hydroelectric plants' reservoirs, monitored by the operations team, Energy Generation Operations Center (COGE), and the data are stored in B.D.H.E – Hydroenergetic Data Bank - Version: 5.01.	At the hydroelectric plant we monitor the total volume of water collected, which is to be used in the process, passes through the turbines and returns to the natural course in 100% of our hydroelectric plants. We monitor the total volume of water catchment for human consumption, cleaning and gardening, and monitor the volume of water in our assets in different regions of Brazil. As for Mandacaru and Salinas wind farms, were integrated to the monitoring system. Method and Frequency: daily measurements with hydrometers installed in water catchment points, and monthly monitoring.
Water withdrawals – volumes by source	100%	Daily	The measurement is made by stations installed in our hydroelectric facilities to measure rainfall and water level in the river, pluviograph and pluviometers installed in hydroelectric plants' reservoirs, monitored by the operations team, Energy Generation Operations Center (COGE). The measurement is made in 100% of the Company's facilities through hydrometers installed in water catchment points.	At AES Brasil we monitor the total volume of water collected in the main reservoirs of hydroelectric plants (HPPs), small hydropower plants (SHPs), and in rivers of the following river basins: Grande, Tietê and Mogi Guaçu, which integrate the company's operations water network. Regarding water catchment for human consumption, cleaning and gardening: At AES Brasil we monitor the volume of water catchment by source (surface fresh water, underground water and third party supply) in 100% of the Company's facilities (18 operational assets).
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Monthly	Water samples are collected and sent for physical-chemical analysis in the laboratory. The methodology used by the laboratory is Standard Methods for the Examination of Water and Wastewater - 23rd Ed. Washington, DC: APHA, 2017.	At AES Brasil, we monitor 100% of the collected water quality. Analyses are conducted by ISO 17025 certified laboratory, and the results are assessed by the environment team. The frequency varies according to the Monitoring and Measurement Plan, for example: i) Monthly: quality of water for human consumption and potability standard (MS N° 888/ 2021 e 5/2017); ii) Quarterly for the quality of water in reservoirs through the collection method in upstream and downstream points (CONAMA Resolution 357, amended by CONAMA 410 and 430), and iii) Semi-annually in artesian wells, according to parameters (SS 65 Resolution and full CVS05 Ordinance). We hourly measure the level of water in our reservoirs and flow of main rivers belonging to Paraná River water network to identify and quantify whether the water courses are somehow impacted, by upstream and downstream monitoring.
Water discharges – total volumes	100%	Continuously	Measurement and monitoring are made by flow sensors (hydrometers) The volume of effluent discharge is estimated based on Brazilian standard NBR 7229, which considers the contribution of discharge, in case of effluents, the value of 80% of the local water consumption.	In hydroelectric plants, the total volume of water discharge is destined to the electricity production process. The water passes through the turbines to rotate a generator that converts the rotating turbines kinetic energy into electric current and follows its natural course. At AES Brasil we make hourly measurements and monitoring with flow sensors to ensure efficiency and safety to the operation. As for the effluents generated from the use of water for human consumption, cleaning and gardening, we monthly monitor the administrative liquids effluents from cleaning, bathrooms and gardening activities. In 2022, we also integrated the monitoring of Mandacaru and Salinas wind farms. The volume of effluent discharge is estimated based on Brazilian standard NBR 7229, which considers the contribution of discharge, in case of effluents, the value of 80% of the local water consumption.
Water discharges – volumes by destination	100%	Monthly	Measurement and monitoring are made by flow sensors (hydrometers) For effluents, the measurement is estimated based on Brazilian standard NBR 7229, which considers the volume of effluents as 80% of the local water consumption and is monitored according to CONAMA Resolution 357 of 2005.	At AES Brasil, we monitor water discharge volumes by destination in 100% of our facilities. Water discharge for process represents 99.97% of the total water discharge volume of AES Brasil facilities. Hourly measurements and monitoring of the total volume of water used for electricity production in hydroelectric plants, and monitoring is made regularly. Regarding the effluents generated from the use of water for human consumption, cleaning and gardening, they represent 0.03% of the total volume generated by the company. These effluents are destined to septic tanks (primary treatment), and cleaning is made by specialized company, when necessary), or downstream. the total volume of effluent discharge is monthly estimated based on Brazilian standard NBR 7229, which considers the volume of effluents as 80% of the local water consumption, and is monitored according to CONAMA Resolution 357 of 2005.
Water discharges – volumes by treatment method	100%	Monthly	The methodology used by the laboratory is Standard Methods for the Examination of Water and Wastewater - 23rd Ed. Washington, DC: APHA, 2017.	At AES Brasil, we monthly monitor the volumes of water discharge by treatment method in 100% of our facilities. - Discharge of water for process: there is no applicable legislation requiring hydroelectric operation water discharge treatment, as presented, the water passes through the turbines to generate electric current and returns to its natural course. - Effluents generated from the use of water for human consumption, cleaning and gardening (0.03% of total discharges of the company) are destined to septic tanks (primary treatment), and cleaning is made by specialized company, when necessary), or downstream. Method and Frequency: the total volume of effluent discharge is monthly estimated based on Brazilian standard NBR 7229, which considers the volume of effluents as 80% of the local water consumption, and is monitored according to CONAMA Resolution 357 of 2005.
Water discharge quality – by standard effluent parameters	100%	Yearly	There are several parameters measured, as BOD, Total phosphorus, Total nitrogen, Chlorophyll A, Transparency, pH, Temperature, DO, oils and greases, and cyanobacteria. The methodology used by the laboratory is Standard Methods for the Examination of Water and Wastewater - 23rd Ed. Washington, DC: APHA, 2017.	At AES Brasil, we monitor the water discharge quality by standard effluent parameters, twice a year. Analyses are conducted by ISO 17025 certified laboratory. Results are assessed by auditors during ISO 14001 audits, through sampling. - Discharge of water for process: we monitor the effluent quality of 100% of hydroelectric plants, dams upstream and downstream water quality to identify any impact on water courses. Method and Frequency: the main parameters monitored annually are: BOD, Total phosphorus, Total nitrogen, Chlorophyll A, Transparency, pH, Temperature, DO, oils and greases, and cyanobacteria. - Effluents generated from the use of water for human consumption, cleaning and gardening: at AES Brasil we monitor the effluent parameters of Effluent Treatment Plants and Oil-water separators. Method and Frequency: semi-annually, according to standards established by CONAMA Resolution 430 and article 18 of Decree 8468.

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Not relevant	<Not Applicable>	<Not Applicable>	AES Brasil activities do not generate any kind of emissions to water and there is no tendency to generate in the future.
Water discharge quality – temperature	100%	Quarterly	Temperature is monitored by sensors installed at the outlet of the pipes.	To ensure appropriate levels for the development of aquatic species and comply with local legislation and Sustainability, Biodiversity and Land Use Policies guidelines; at AES Brasil, the temperature monitoring of water discharges occurs in all hydroelectric generation operating units and is related to the cooling system of the plants. When the river water passes through the turbines to generate energy, a portion is diverted to a chamber in which it cools the plants' oil system by means of heat exchange with the pipes. After this process, the water is returned to the river course. AES Brasil monitors the water temperature at this point of discharge in order to avoid any impact on the river conditions. We monitor water temperature in dams quarterly, according to CONAMA Resolution nº 357/2005 (amended by CONAMA Resolutions nº 410/2009 and nº 430/2011).
Water consumption – total volume	100%	Monthly	Water for human consumption is made by hydrometers.	At AES Brasil hydroelectric plants, we don't consume water, we use water to produce electricity, and this water returns to its natural course. So there is no impact on the quantity and quality of this natural resource. Water for human consumption, cleaning and gardening is calculated and monitored monthly by estimate, 20% of the total water captured, since 80% is the estimate of effluent generation based on the Brazilian Standard NBR 7229 and monitoring is monthly. In relation to the water used for the generation of energy is non-consumptive use, it uses the water in the operation without consuming it. At AES Brasil, we monitor water for human consumption, cleaning and gardening: in 100% of our operational assets and at the Energy Generation Operations Center (COGE) integrated to the water catchment control, whose measurement is made by hydrometers. In 2022 we integrated Mandacarú and Salinas wind farms and they already have their water quality monitoring.
Water recycled/reused	Not relevant	<Not Applicable>	<Not Applicable>	The monitoring of recycled water is not relevant since AES Brasil does not perform this process. Since 2017, the company has had a Biological Effluents Treatment Plant with Water Reuse in COGE, but this plant did not operate in 2022 due to low demand and decrease in the amount of employees in the unit. When it becomes operational, this system will receive all the biological effluent in a compact and automated station. The volume will be treated by sand filters, activated carbon, UV lamps, and chlorine injection, to be later directed as reuse water for the COGE toilets. As soon as the plant starts to operate, AES Brasil will start to monitor the volume of reused water and this category will become relevant.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Monthly	There are several parameters measured, as turbidity, total coliforms, thermotolerants/E. Coli, heterotrophic bacteria, Ph, residual chlorine, apparent color, odor, taste and fluoride. The methodology used by the laboratory is Standard Methods for the Examination of Water and Wastewater - 23rd Ed. Washington, DC: APHA, 2017.	At AES Brasil, we comply with standards in force related to the rendering of water, sanitation and hygiene services. This management is made monthly to ensure safe consumption and use of water by our collaborators in 100% of our facilities. The company's potable water is monthly analyzed as to turbidity, total coliforms, thermotolerants/E. Coli, heterotrophic bacteria, Ph, residual chlorine, apparent color, odor, taste and fluoride. The monitoring is made to ensure water supply with quality and safety for human consumption, and its potability standard. Consolidation Ordinance nº 5/GM/MS, of 2017 and Ordinance GM/MS Nº 888, of 2021 Amends Annex XX of Consolidation Ordinance GM/ nº 5, of September 28, 2017, and Resolution SS 65, quality of water for human consumption in the ambit of São Paulo State Water Quality Surveillance Program.

W-EU1.2a

(W-EU1.2a) For your hydropower operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations measured and monitored	Please explain
Fulfillment of downstream environmental flows	100%	In the 9 hydroelectric plants, 3 small hydropower plants belonging to AES Brasil, the Operations area monitors, on a daily basis, upstream flows. Using meters installed along the river, flow data are continuously monitored and analyzed by the Energy Generation Operation Center (COGE) teams. Moreover, the company monitors upstream, with measurements in the main tributaries. This information is used in the process of decision making for energy generation or opening of Gates. Therefore, in reservoirs and tributaries we promote the Water Monitoring Program, which enables the assessment of upstream and downstream water conditions. In addition, an annual monitoring of upstream and downstream water quality is carried out, in order to demonstrate that the quality has not been altered by the operation of the hydroelectric plants.
Sediment loading	100%	At AES Brasil we monitor the removal of sediments to keep the water quality and the hydroelectric plants reservoirs storage capacity, to achieve more efficiency in energy production and contributing to reduce service life. We quarterly measure samples of sediment load in the rivers, according to the environmental licensing requirements of AES Brasil's 9 hydroelectric plants, and 3 small hydropower plants. These data are monitored to identify eventual situations of siltation, thus enabling timely action in case any irregular parameter is identified. The sediments physical and chemical parameters are assessed according to CONAMA Resolution 454/2012, which establishes general guidelines for the management of dredged material.
Other, please specify	100%	AES Brasil also keeps several programs for biodiversity conservation, and the Fishery Management Program is outstanding. It is an initiative for fish repopulation in the rivers, promoting annual release of 2.5 million fingerlings by the company. These efforts contribute to the ecosystem quality as a whole and also impact on sources preservation and, indirectly, on the water quality for operations and for the other players that use bodies of water. In 2022, we semi-annually monitored the dynamics of reservoirs due to the limnological and hydrological characteristics of the system. The results assist in the adoption of control measures to improve the water quality.

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	101936824.38	Much higher	Other, please specify (Change in meteorological condition, generating increased rainfall and water availability.)	About the same	Increase/decrease in business activity	<p>Hydroelectric operations represent the vast majority of the total volume of our water withdrawals. This volume passes through turbines and return to its normal course, not impacting on the water quantity or quality.</p> <p>At AES Brasil, In 2022, there was 27.06% increase in the volume of discharge of fresh surface water in AES Brasil operations, which amounted to 101,936,824.38 megaliters, much higher than in 2021, which was 80,226,202.93 megaliters.</p> <p>Definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend.</p> <p>The main factors for this performance were the hydrological conditions that marked the year of 2021, that presented the worst affluence history since 1931. In 2022, these conditions returned to normality and energy production from hydroelectric plants increased compared to 2021. The increase in rainfall and water availability in 2022 also contributed to this scenario of higher flows in the year.</p> <p>Since climate changes affect water availability, at AES Brasil we study several possible scenarios that must be constantly re-assessed, since the standard variables correlation underwent changes, for example, rainfall, flow and evapotranspiration. However, the withdrawals volume is only affected by hydrological cycles, once hydroelectric operations had achieved maximum potential.</p> <p>Besides that, the increase in that volume can be attributed to the expansion of the operations. In April/2021, the Salinas and Mandacará wind farms assets were concluded, and, in 2022, Tucano wind farm operation started.</p> <p>At AES Brasil we count on a strategy focused on the portfolio growth and diversification by developing projects of renewable sources to complement water sources, expanding our installed capacity to produce energy from wind and solar sources. Therefore, we forecast withdrawals will remain stable in the next years, since there is no plan to expand or reduce hydroelectric operations.</p>
Total discharges	98220126.78	Much higher	Other, please specify (Change in meteorological condition, generating increased rainfall and water availability.)	About the same	Increase/decrease in business activity	<p>Hydroelectric operations represent the vast majority of the total volume of our water discharges. At AES Brasil, In 2022, there was a 22.02% increase in the volume of discharge of fresh surface water in AES Brasil operations, which amounted to 98,220,126.78 megaliters, against 80491420.73 megaliters in 2021.</p> <p>The main factors for this 2022 performance are the same as those applicable to withdrawal, associated to the stabilization of weather conditions and to AES operations expansion.</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend</p> <p>Discharges from water consumption in administrative activities of sanitary use (cleaning, toilets and gardening) represent a very low volume.</p> <p>As for discharge of effluents for human consumption, cleaning and gardening, the expectation for the coming years is that the total volume of water collected for human consumption will increase in some assets, due to the start of operation of Tucano wind farm in 2022 and Cajuína wind farm in 2023. However, as this volume represents a very low volume (less than 0.03% of total discharges), the forecast is that the total volume will stay about the same.</p>
Total consumption	3716697.6	Much higher	Other, please specify (Change in meteorological condition, generating increased rainfall and water availability.)	About the same	Increase/decrease in business activity	<p>In 2021 the volume of "Total discharges" was higher than the volume of "Total withdrawals" due to the year 2021 having represented the largest water drought in the last 90 years, so it is observed that the reservoirs had to be depleted at very low levels, that is, the affluent flows fell, being necessary the use of the dammed volumes, which happened for the entire water generation sector. Therefore, the total consumption appeared as negative in the last year.</p> <p>The hydro scenario of 2022 was favorable for hydro generation, with total withdrawals being greater than total discharges, therefore, when comparing the consumption of 2022 with that of 2021, a significant difference is noted.</p> <p>Note: for hydroelectric plants we inform only withdrawals and discharges, because in AES Brasil operation we don't consume water for energy production, since the natural resource is stored, used and then returned to its natural course, without impacting on the water quantity and quality.</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend.</p>

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	1-10	Higher	Other, please specify (Change in meteorological condition, generating increased rainfall and water availability.)	About the same	Increase/decrease in business activity	WRI Aqueduct	<p>For reporting purposes in the CDP, AES Brasil used the WRI Aqueduct tool, from the World Resources Institute (WRI), to assess the level of water stress in water withdrawal locations. To assess water stress on the WRI platform, the addresses of the operational units were entered. For the operations with direct local withdrawal, the address of the unit is the same as the withdrawal point. In the units where there is third-party supply, it is not possible to determine the specific point of withdrawal from the utility.</p> <p>At AES Brasil, for purposes of monitoring and reporting, we annually assess the framing of our units in areas with water stress using Aqueduct Risk Atlas platform, from the World Resources Institute (WRI).</p> <p>In 2021, three HPPs (Caconde, Limoeiro and Euclides da Cunha) and four wind farms (Alto Sertão II Salinas, Ventus, Mandacru) were under high or extremely high general water risk, according to the platform parameters. As for the Global Risk, they were classified as High (3-4).</p> <p>In 2022, these operations withdrawn 5.3 million megaliters, an 88% increase against 2021 (2,811,072.85 megaliters withdrawn from water risk areas). In 2022, this volume represented 5% of the total volume withdrawn.</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend</p> <p>In terms of management, the company counts on area of Energy Studies that monitors with software and meteorological and climate analyses the condition of rainfall and affluence of the basins where the company's assets are located and in Brazil as a whole. The water stress assessment is dynamic, updated according to the hydrological scenario, because climate changes interfered with the magnitude and frequency of climate conditions in several Brazilian regions.</p> <p>The teams monitor from daily reports and short-term projections to long term hydrological scenarios to support AES Brasil hydrological risk protection and strategic planning.</p>

W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	101936783.03	Much higher	Increase/decrease in business activity	<p>Hydroelectric operations represent 99.97% of the total volume of our withdrawals of fresh surface water, including rain water, water from swamps, rivers and lakes. In 2022, there was a 27% increase in the volume of discharge of fresh surface water in AES Brasil operations, which amounted to 101,936,783.03 megaliters, higher, when compared to 2021, which was 80,226,202.93 megaliters.</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend.</p> <p>The main factor for the higher volume when compared against 2021 was the water scarcity scenario of that year, as reported in CDP 2022.</p>
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	At AES Brasil we consider surface brackish water/sea water not relevant, as the company does not collect surface brackish water or sea water.
Groundwater – renewable	Relevant	38.64	Much higher	Other, please specify (Unnatural hydrological conditions for 2021.)	<p>We classify as relevant the withdrawal of groundwaters – renewable. The volume is measured monthly in all operational units directly by hydrometers. Groundwater withdrawal occurs in 12 units. In 2022, the volume withdrawn of groundwater – renewable, was 38.64 megaliters, higher against 2021: 32,024 m3 (33.43 megaliters), a 20% increase.</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend.</p> <p>The main factors for this performance was the expansion of the operations.</p>
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	At AES Brasil we consider Groundwater – non-renewable water not relevant because does not draw groundwater - non-renewable.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	At AES Brasil we consider Produced/Entrained water not relevant because does not generate produced/existing water in its processes.
Third party sources	Relevant	2.71	Much higher	Increase/decrease in business activity	<p>At AES Brasil we consider relevant withdrawal of water from third party sources for human consumption. This measurement is made monthly with the reading of hydrometers by the local sanitation concessionaire at AES Brasil facilities that count on supply by third party sources.</p> <p>In 2022, the volume collected was 2.71 megaliters, much higher when compared to that of 2021 (1,488 m3 or 1.49 megaliters), with an 82.19% increase.</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend.</p> <p>The main factors for this performance were the increase in operations and expansion of the units and, consequently, the number of employees, increasing the demand for water in the facilities.</p>

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	98220092.65	Much higher	Other, please specify (Unnatural hydrological conditions for 2021.)	AES Brasil considers relevant the discharge to fresh surface water. In 2022 it represented 99.99997% of the discharge associated to water use in hydroelectric plants for electricity generation. In 2022, there was a 22.03% increase in the volume of discharge to fresh surface water in AES Brasil operations, which amounted to 98,220,092.65 megaliters, much higher when compared to 2021, which was 80,491,367.11 megaliters. The main factors for this performance were the hydrological conditions of 2021, which presented the worst record of inflows since 1931. Since climate changes affect water availability, at AES Brasil we study several possible scenarios that must be constantly re-assessed. This volume tends to be at a constancy level, due to the influence of hydrological cycles in the AES processes, any kind of variations is not resultant on an operational difference To compare the annual performance, the premises indicated in the previous question were considered.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	AES Brasil does not collect brackish surface water, or seawater.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	The company considers the disposal of effluents into groundwater not relevant. It is considered that 80% of the water captured for human consumption, cleaning and gardening is discarded. This disposal is treated in internal facilities and sent to septic tanks. Every six months, the effluents from the septic tanks are collected by a third party, which is sent for final treatment. As this effluent is treated by a third party, it is considered non-relevant and is reported in the line below.
Third-party destinations	Relevant	34.13	Higher	Increase/decrease in business activity	The company considers the allocation of effluents to a relevant third party. Monitoring in 100% of facilities of administrative liquid effluents referring to sanitary uses, with NBR 7229, considers the contribution of effluent discharge as 80% of local water consumption. In 2022, the destined value was 34.13 megaliters, being very close to the value of the previous year (29.19 megaliters - total value reported as groundwater and third part). The increase on the destination is due to the expansion of the operations. For the coming years, the perspective is of an absolute increase in the volume of water discharged, considering our strategic development plan and the expansion investments.

W1.2j

(W1.2) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<p>AES Brasil generates effluents from administrative activities of sanitary uses (cleaning, toilets, gardening), cleaning of photovoltaic panels, which represents 0.000036% of the total volume of effluents generated by the company, therefore, it is not relevant.</p> <p>As for hydroelectric plants effluent, it is not relevant either, because the river water that passes through the turbines follows its natural course without changing the amount of water, so it is not necessary to treat effluents due to the low concentration, below the parameters of the legislation in force.</p> <p>Since 2017, the COGE has had a Biological Effluent Treatment Plant with Water Reuse, but this plant did not operate in 2022 due to low demand and the reduction in the number of employees at COGE. When operational, this system will allow reused water to be directed to the toilets at COGE.</p>
Secondary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	The total effluent generated by AES Brasil from water use in administrative activities of sanitary uses (cleaning, toilets, gardening), cleaning of photovoltaic panels, is not relevant compared to the volume of effluents generated by the company. AES Brasil monitors 100% of its 8 compact Effluent Treatment Plants.
Primary treatment only	Relevant	31.99	Higher	Increase/decrease in business activity	71-80	<p>AES Brasil sent, in 2022, a total of 31.99 megaliters of sanitary effluent to primary treatment in septic tanks. Compared to the previous year, it was higher, once in 2021 it was 28,01 megaliters, representing an increase of 14,22%. This effluent is destined to septic tanks, considered as primary treatment, and their cleanings are performed by specialized company when necessary, and downstream.</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend.</p> <p>In compliance with Brazilian regulatory standards, in 2022, we monitored the quality of effluents by specialized outsourced company. The analyses were conducted by ISO 17025 certified laboratory for assessment and monitoring of all 8 Sewage Treatment Plants installed and the parameters of oil and grease at effluent drainage and outlet points from the 12 Oil-Water Separators, of all our facilities (9 hydroelectric plants, 3 small hydropower plants), compliant with CONAMA (Brazilian Environmental National Council) Resolution 430 and art.18 of Decree 8468.</p>
Discharge to the natural environment without treatment	Relevant	98220092.65	Much higher	Other, please specify (Change in meteorological condition, generating increased rainfall and water availability.)	61-70	<p>The total volume of AES Brasil discharge to the natural environment in 2022 was 98,220,092.65 megaliters, associated to water use in hydroelectric plants for generation of electricity, maneuver of spillways and cooling of equipment. There was a 22.03% increase, much higher against 2021, which was 80,491,391.53. This reported value refers to 100% of AES Brasil facilities that generate energy from water source, that is, 9 Hydroelectric plants (HPP) and 3 small hydropower plants (SHP), which represents 63% of the company's assets and 64% of the company's total installed capacity in 2022, what makes it relevant for AES.</p> <p>AES Brasil annually monitors the quality of water, upstream and downstream of dams, to verify whether the water courses are suffering any impact. The main parameters monitored are: BOD, total phosphorus, total nitrogen, chlorophyll A, Transparency, pH, Temperature, DO, oils and greases, and cyanobacteria.</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend</p> <p>The results of the effluent analyses of AES Brasil are in compliance with regulatory standards.</p>
Discharge to a third party without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<p>AES Brasil considers not relevant discharge to third party without treatment, because it does not carry out such destination.</p> <p>As part of AES operation, the water only passes through a turbine to generate electricity. The quantity and quality of the water remains the same after the process. Thus, the discharge to a third party is not relevant for AES operation</p>
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	There are no other categories to report.

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	28451000	101936821.55		AES Brasil considers total efficiency in water withdrawal, net revenue division by the total volume of water withdrawal (megaliters) in AES Brasil operations. In 2022, this index was 27.91 reais of revenue generated for each megaliter withdrawn. There was a 10.86% evolution against the previous year, which was 31.31; due to portfolio diversification, which expanded the installed capacity for production of energy from wind and solar sources, complementing the water source.

W-EU1.3

(W-EU1.3) Do you calculate water intensity for your electricity generation activities?

Yes

W-EU1.3a

(W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

Water intensity value (m3/denominator)	Numerator: water aspect	Denominator	Comparison with previous reporting year	Please explain
9014.42	Total water withdrawals	MWh	Higher	<p>AES Brasil is composed of 23 operational assets, of which 12 (9 hydroelectric plants and 3 small hydroelectric plants) use water for power generation, therefore non-consumptive use, that is, it uses water in operation without consuming it. The water used in the operation of AES Brasil returns to its natural course. AES Brasil monitors the Value of water intensity (m3), calculated by the relationship between total water collection and the electricity generated by its hydroelectric plants, its wind and solar complexes.</p> <p>The monitoring of the indicator is carried out by the areas of environment and sustainability. Over the next few years the company will have a historical information base of the indicator to assist in the evaluation for decision-making in favor of the evolution of efficiency in energy production and best practices of water collection.</p> <p>The total water intensity in AES Brasil operations considers the total volume withdrawn by operational units divided by the total of raw energy generated by its generating units. In 2022 this index was 9,014.42 cubic meters withdrawn for each raw 1 MWh of energy generated. There was an increase of 7.12% comparing with the index in 2021 (8,415.02)</p> <p>Our definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%. This threshold is also used for the future trend</p> <p>The main factor for the index increase was the increase in raw energy generation in 2022, a total of 11,308,200.00 MWh, higher than in 2021 (9,522,800.00 MWh), and also due to the increase in volume withdrawn from 80,226,239.42 megaliters in 2021 to 101,936,821.72 megaliters in 2022, resulting mainly from the water scarcity scenario in the 2021 period, with historical levels of low affluence in SIN during the nine first months of the year, which influenced the water dispatch for recovery of the System reservoirs' levels that we have had in 2021.</p> <p>This indicator is followed up by AES Brasil to monitor the water efficiency of the auxiliary activities supplied by this catchment (human consumption, cleaning, gardening, etc.) For the coming years, an increase in the volume captured is expected due to the entry into operation of new assets. However, in line with the good practices of transparency of the B3 New Market, AES Brasil does not disclose guidance on future operating and financial results, making it impossible to disclose a trend for the result of water intensity in the coming years.</p>

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	No	AES Brasil works with water management to generate electricity through water passing in hydroelectrics. Quality and quantity of water does not varies at all. Additionally, water quality is measured regularly to ensure safety. There are no hazardous substances that passes through hydroelectric turbines, thus the product does not contain or generates any kind of hazardous substances. The entire volume that passes through the turbines is returned to the system with quality equal to or higher than that recorded at the entrance.

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement	Primary reason for no engagement	Please explain
Suppliers	No	Judged to be unimportant	The use of water by the company's suppliers is not a material issue. Therefore, there is no plan to engage this public on this topic.
Other value chain partners (e.g., customers)	Yes	<Not Applicable>	<Not Applicable>

W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

Type of stakeholder

Other, please specify (Local communities and business)

Type of engagement

Innovation & collaboration

Details of engagement

Collaborate with stakeholders on innovations to reduce water impacts in products and services

Rationale for your engagement

As in other aspects of environmental management, the assessment of water risks related to the Company's business occurs in an integrated manner to the corporate risk management process. In this context, it evaluates, prioritizes and defines mitigation measures, whenever necessary, for situations such as conflicts related to the use of reservoirs, leaks in operations, emergencies in the integrity of dams and adverse conditions of river inflow and rainfall.

In this context, AES identify the risk of silting in its hydroelectric.

One of the mitigation strategies was to collaborate of local organizations to reforest local areas, in order to reduce silting risk.

In this model, the company provides the planting area, seedlings, and the management expertise of its engineers and biologists, and relies on investments from partners to multiply the scale and positive impacts of the recovery of areas. The AES Brasil nursery at the Promissão hydroelectric power plant produces about 1 million seedlings every year, used in the Mãos na Mata program. Additionally, the project supports other socioenvironmental projects, with a focus of income generation and cultural appreciation.

Impact of the engagement and measures of success

In 2022, the main results an impacts of this engagement initiative was: the company reforested 253.9 hectares and 1 million seedlings were produced. Since the beginning of Mãos na Mata, AES Brasil has reforested 4,937 hectares, and the company's goal is to recover another 1,470 hectares of Atlantic Forest and Cerrado by 2029. The initiative generated a reduction in the direct cost of reforestation processes, since this is shared with the program partners. With impacts in scale, Mãos na Mata allows the reforestation of more extensive areas, contributing more effectively to the protection of springs.

The success of engagement is measured by the number of reforested hectares per year. AES has a goal to increase reforestation by at least 20% in addition to the commitment to recover occupied áreas, until 2030.

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

Yes

W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Country/Area & River basin

Brazil	Other, please specify (São Paulo, Guaimbê Solar Complex)
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Type of impact driver & Primary impact driver

Chronic physical	Precipitation and/or hydrological variability
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Primary impact

Reduction or disruption in production capacity

Description of impact

On 2022 4th quarter one of our solar complexes (Guaimbê) was impacted by the increase of the precipitation levels on the region. The increase in the occurrence of rainfall led to lower irradiance, resulting in a lower generation of energy by this complex. However, this was partially offset by greater availability of assets in the period and the total gross solar generation for this quarter was only 2% lower when compared against the same period in 2021.

For the whole year of 2022 the impact of the occurrence was not substantial, as total gross energy generation for Guaimbê Solar Complex was stable in relation to 2021, mainly due to the higher availability of the plant (98.4% in 2022 vs. 96.0% in 2021).

The financial impact was a reduction of BRL 1.7 million on 4Q 2022 EBITDA. Total EBITDA on this quarter, however, increased 76.7% when compared to same period in 2021, having been offset by the increase in energy generation from other matrices.

Primary response

Other, please specify (Portfolio diversification strategy)

Total financial impact

1789233000

Description of response

Unfavorable hydrological conditions can adversely impact the businesses and operational results. While increased precipitation benefits hydropower generation, it negatively affects solar power generation. As a response strategy to address this, AES Brasil employs active portfolio management in energy trading, mitigating hydrological risks on the company's margin. Integrated management allows us to anticipate market price effects, adjusting our energy balance and reducing short-term market exposure risks. Our diverse energy matrix contributed to a positive EBITDA, as stated in column 4.

AES Brasil's growth strategy includes acquiring and developing wind and solar power projects for portfolio diversification. Investments prioritize geographical and matrix diversification to minimize climate and water-related impacts. Additionally, research and development aid in estimating financial impacts and planning ahead.

The total financial impact considers the impact on EBITDA (BRL 1,733,000.00), as disclosed in our financial reports (such as in the 4Q22), and 2022 expansion investments (BRL 1,787,600,000.00) in wind complexes Tucano (BRL 473,900,000.00) and Cajuína (BRL 1,313,600,000.00). These initiatives align with our matrix diversification strategy.

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	No	<Not Applicable>	

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified	Please explain
Row 1	Yes, we identify and classify our potential water pollutants	In compliance with national regulations we monitor every 6 months the quality of effluents. The analyses are conducted by an ISO 17025 certified laboratory for assessment and monitoring of all our Sewage Treatment Plants installed and the parameters of oil and grease at effluent drainage and outlet points from the 12 Oil-Water Separators, of all our facilities, compliant with CONAMA (Brazilian Environmental National Council) Resolution 430 and art.18 of Decree 8468. The potential pollutants are analysed using parameters DBO and DQO. DBO measures the quantity of soluble material, like organic compounds. DQO quantifies the dissolved material, like metals or gases. Both parameters determine the efficiency of the treatment system and are based on the Standard Methods for the Examination of Water and Wastewater, methods 1060 A/B/C e 9060 A/B of the 23rd edition. AES Brasil conducts Water Quality Monitoring aligned with the Sustainability, Biodiversity and Land Use Policies. Focused on water quality on reservoirs and on increasing water security, the Water Quality Monitoring Program oversees the conditions and transformations of the aquatic environment, based on the quality standards set by Conama Resolutions 396/2008 and 357/2005. The program enables the generation of useful data for water management and water quality assessment in the monitored springs, according to criteria defined for use in subsistence irrigation projects in local communities.	<Not Applicable>

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category

Oil

Description of water pollutant and potential impacts

Oil residues or spills of gasoline, lubricants, etc. can potentially enter the environment through stormwater. Hydrocarbons can have a visible impairment on surface water, creating a sheen on the water surface or coating shorelines. Oils can also impact wildlife by coating them with oily film and disrupting sensitive ecosystems such as wetlands and nesting areas. The scale and magnitude of the impact would depend on the amount released. One gallon of oil can contaminate up to 1 million gallons of water.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Industrial and chemical accidents prevention, preparedness, and response
Other, please specify (Compliance with effluent Quality standards)

Please explain

AES Brasil's operational units have special areas for the containment and storage of oils and chemical products to prevent leaks and spills from reaching the environment, especially through rainwater. These areas are inspected regularly. The company also has emergency and spill response plans for the prompt response to possible incidents. The measurement of the effectiveness of these strategies is carried out through the monitoring of occurrences and compliance with the requirements applicable to environmental licensing. The success metric is to have no leaking or spilling occurrence in a year. In 2022, no occurrence was registered. Eventual cases of spills are registered in management systems and reported internally and to the competent authorities, when necessary. In addition, we carry out an annual simulation in each location of the Environmental Emergency Response Plan. Employees are trained to respond to an environmental emergency, and the locations have kits to respond to environmental emergencies with absorption materials. For the most significant cases, AES maintains a contract with a company specialized in responding to environmental emergencies. This company has structure and equipment suitable for cleaning and capturing large-scale leaks.

Water pollutant category

Other, please specify (Thermal pollution)

Description of water pollutant and potential impacts

Discharges of water at temperatures higher than the normal watercourse temperature can impact aquatic biodiversity by altering environmental conditions. In hydroelectric plants, water diverted for cooling the pipeline system through heat transfer may eventually heat up above the expected optimum levels.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Other, please specify (Compliance with effluent Quality standards)

Please explain

In order to avoid this type of impact, AES Brasil continuously monitors the temperature of the cooling water at the point of exit, taking corrective measures whenever necessary to ensure optimal operating conditions and not impact the environment. The success of this management is measured by compliance with environmental licensing requirements and by the monitoring of occurrences outside the temperature parameters established by the Integrated Management System (IMS). The success metric is to have no occurrence that do not comply with the parameters established by the IMS in a year. In 2022, no occurrence was registered.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage

Direct operations
Supply chain
Other stages of the value chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Enterprise risk management

Tools and methods used

COSO Enterprise Risk Management Framework
ISO 31000 Risk Management Standard

Contextual issues considered

Water availability at a basin/catchment level
Water quality at a basin/catchment level
Stakeholder conflicts concerning water resources at a basin/catchment level
Implications of water on your key commodities/raw materials
Water regulatory frameworks
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers
Employees
Investors
Local communities
NGOs
Regulators
Suppliers
Water utilities at a local level
Other water users at the basin/catchment level

Comment

AES Brasil risk management policy was approved by AES Brasil Energia S.A. Board of Directors on 09/10/2021 and is available on AES Brasil institutional website at Policies and Rules.

AES Brasil's continuous risk management process is conducted in a structured manner and considers the identification of and response to climate risks. This management is guided by the Risk Management Policy and follows the best methodologies (COSO Enterprise Risk Management) and market practices. The company has a risk matrix (Heat Map) and classifies the risks identified and monitored into ten categories - market, legal, compliance, environmental, strategic, financial, regulatory, operational, credit and technology. Each of the risks, regardless of the category it falls into, is assessed considering financial, socio-environmental, security, reputational, regulatory and operational impacts. In the environmental risk category are potential impacts of operations on water resources. Also noteworthy in this risk matrix is the issue of dam safety and climate risk (which includes impacts from water availability). AES Brasil is also engaged in the basin committees that operate in the regions where its hydroelectric power plants are located. In these forums, the company articulates with other local players initiatives for the shared use of water and the conservation of biodiversity. Additionally, the company has a specific area, which continuously monitors this critical aspect of the hydroelectric generation sector and is subject to regulation by the National Electric Energy Agency (Aneel).

W3.3b

(W3.3b) Describe your organization’s process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	<p>Based on the COSO methodology, AES establishes a risk management process and policy.</p> <p>The monitoring of activities and performance is a support for decision making. Following COSO guidelines, some controls are aligned with the directors of the 1st line of defense to deal with responses related to risk, which we call the Key Risk Indicator (KRI). This information supports the evaluation of the performance of the action plans, the criticality of the impacts and the probability of occurrence.</p> <p>This process seeks to ensure the planned results of the company. The assessment of the commercial margin by measuring the annual risk (CVAR95) versus the Budget aims to adjust performance through the progressive implementation of risk reduction strategies and normally considers the medium-term horizon.</p> <p>The impacts of climate risk are assessed by the Weather Risk Committee. Also there is a specific area, which continuously monitors this critical aspect to the hydroelectric generation sector and target of regulation by the National Electric Energy Agency (Aneel).</p> <p>Mitigation plans of water risks may include:</p> <ul style="list-style-type: none"> -partnerships with initiatives that deal with the issue of water stress in the hydrographic basins where AES operates, for the development of joint solutions regarding availability of the necessary affluence for the generation of hydroelectric energy - continuous assessment of new opportunities to diversify the portfolio of assets, seeking to reduce water dependency. 	<p>Water availability at a basin/catchment level:</p> <p>Satisfactory quantity and quality of water withdrawn and discharged is essential for almost all operations. For the hydroelectric portfolio, adequate levels of inflow are required for effective operation.</p> <p>Water quality at a basin/catchment level: For the hydroelectric power plant, poor water quality can decrease operational efficiency, causing excessive wear on turbine blades and increasing maintenance costs.</p> <p>Implications of water on your key commodities/raw materials: Water is a critical commodity for AES Brasil's hydroelectric plants.</p> <p>Water regulatory frameworks: Because AES Brasil's operations depend on adequate water quality and quantity, any regulatory limitations or costs associated with water supply are an important business consideration.</p> <p>Status of ecosystems and habitats: Biodiversity is important for water security in several aspects, especially the role played by native vegetation. It is an indicator of water quality as well.</p> <p>Access to fully-functioning, safely managed WASH services for all employees: All operations depend on adequate sanitation conditions for employees and contractors.</p>	<p>Customers may be impacted in the event of low levels of affluence that impair hydroelectric power generation.</p> <p>Employees can be impacted if the WASH service supply is not in proper condition.</p> <p>Investors, as well as customers, can be impacted in the case of low levels of affluence that impair the generation of hydroelectric power. AES Brasil's profitability and growth objectives are defined in the strategic planning and monitored by the operations, finance and strategy teams, with corrective measures being taken whenever necessary.</p> <p>Local communities are affected by the shared use of the four reservoirs that supply the operations of AES Brasil's hydroelectric plants.</p> <p>NGOs represent the interests of communities and civil society, with a special focus.</p> <p>Water utilities at a local level: Sanitation and tourism companies, as well as communities, depend on the same reservoirs that supply AES Brasil and are involved in multi-sector forums and regional events</p> <p>Regulatory agencies demand compliance with legal requirements and those applicable to the environmental licensing of the units.</p> <p>The management authorities of the Paraná Basin, where AES Brasil's plants are located, monitor risks related to thermal releases, hydrocarbon leakage, dam safety, and shared use of reservoirs.</p>	<p>AES Brasil's Risk Management Policy addresses the risk assessment and response process to reduce risks to acceptable levels. The Policy also provides the responsibilities on the decision-making process along the risk management system and for risk response.</p> <p>As it is based on IIA's Three Lines of Defense, the employees of technical areas are responsible for identifying risks and monitoring the processes related to its mitigation. Besides the recurrent reports sent to the correspondent Directors and to Corporate Risks, Internal Controls and Compliance areas, the technical areas of the first line of defense also report any event or incident that is not within the expected for that risk. And, for any response required for a specific risk, the process escalates from the first to the second line of defense.</p> <p>All the risk responses are implemented by the Executive Board, who is also responsible for prioritizing resources to assure the suitable response for the risks, and to guarantee, among with the Board, that the response is in line with the corporate strategy and ethical standards. Every risk response decision-making process is addressed in recurrent meetings between the Executive Board and the second line of defense (Corporate Risks, Internal Controls and Compliance areas) managers. The Internal Audit (third line of defense) participates through its independent advice on how the responses agreed are compliant with the internal controls and processes.</p>

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, only within our direct operations

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

For AES Brasil, a substantive financial risk is one that has a high probability of occurrence and a high impact. Financial Risk means the risk of economic and financial loss due to exposure to market variables such as interest rates, price indices, exchange rate, commodity prices. Additionally, it also includes the liquidity risk, represented by the Company's lack of financial capacity to pay its foreseen and unforeseen, effective and future debts, including operations with guarantees, without affecting its day-to-day operations and without incurring significant losses. A substantive strategic risk is the one that also has a high probability and impact. Strategic risks are related to the implementation of an inadequate or ineffective strategy that fails to achieve the company's objectives.

AES Brasil risk assessment is made in the ambit of the Company's Strategic assessment. Under the ERM (Enterprise Risk Management), the climate risks were assessed in 3 main pillars: (1) probability of occurrence, (2) impact magnitude, and (3) risk rating. The risk rating analysis considers Probability vs Impact and classifies the risk as very low, low, medium, high and very high. The Board of Directors is responsible for reviewing and approving the risk rating criteria and ranges of financial impact.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	6	26-50	AES Brasil has 12 hydroelectric generation units (9 HPPs and 3 SHPs); 7 seven wind farms in operation and 2 under construction; 2 solar power complexes. In 2022, three HPPs (Caconde, Limeiro and Euclides da Cunha, all in SP) and three wind farms (Salinas, Ventus and Mandacaru), representing 26% of the company's facilities, were located in regions with high or extremely high overall water risk, according to the World Resources Institute's (WRI) Aqueeduct Risk Atlas parameters verified in January 2023.

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

Country/Area & River basin

Brazil	Parana
--------	--------

Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Brazil	Other, please specify (East Brazil South Atlantic Coast)
--------	---

Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

11-20

Comment

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

Brazil	Parana
--------	--------

Type of risk & Primary risk driver

Acute physical	Other, please specify (Impact of water overflow on dam safety)
----------------	--

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Four of nine hydroelectric power plants operate with reservoirs and are exposed to this risk. These plants represented 52,52% of last year's total energy generation, distributed as follow:

Água Vermelha: 4.602,3 GWh (40,70%)

Caconde: 302,2 GWh (2,67%)

Barra Bonita: 341,6 GWh (3,02%)

Promissão: 693,5 GWh (6,13%)

In the event of a situation where AES Brasil's dams are compromised, power plant operation may be interrupted, directly impacting AES's generation capacity. In addition, it may represent a potential social and environmental impact for neighboring populations and a high regulatory cost with fines and the unavailability of assets.

The probability of an occurrence of dam failure is extremely low and unlikely, given the project criteria, construction methods and dam safety management systems adopted by the company, with prevention and control plans. Even so, since the impact is very high, all the necessary measures are taken to protect against this risk.

Timeframe

More than 6 years

Magnitude of potential impact

High

Likelihood

Exceptionally unlikely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

60000000

Potential financial impact figure - maximum (currency)

5440000000

Explanation of financial impact

Structural rupture of dams is contained in the Company's Risk Map and is classified as: HIGH impact and LOW probability, reaching medium rating. The risk is classified as low probability due to the design safety factor (decamillennial) and prevention and control plans implemented (instrumentation, inspections and maintenance). The risk is monitored by the Dam Safety Plan, continuous process of inspection of dams and spillways, and maintenance, if needed. In line with the Company's insurance hiring policy, Operational Risk insurance policy was hired (Property), to ensure to the Company's assets reimbursement of values paid as indemnification, according to conditions established in contract, resulting from repair of material damages caused to properties, equipment and other goods of the Company during the regular exercise of its activities. The current policy is issued with AIG Seguros Brasil and is valid from April 1, 2023 to April 1, 2024, and whose maximum indemnification limit is R\$5,440 billion. The Company and other AES Brasil group companies are covered. In addition to the Operational Risks policy, the Company also keeps for hydraulic assets (and the other AES Group companies) General Civil Responsibility policy, issued with Chubb Seguros Brasil S.A. currently valid from April 1st 2023 to April 1st 2024, with maximum indemnification limit of R\$60 million. For further details on this risk, see item 4.1 of the Reference Form.

Primary response to risk

Develop flood emergency plans

Description of response

The plants' dams are considered an asset and are audited annually within the asset, safety and environment management system to ensure compliance with legal and regulatory requirements (ISO 14001, 45001 and 55001). In 2022, AES plants were recertified in ISO14001, ISO45001 and ISO55001 without reservations related to dam safety.

In general, the safety of the dams of AES Brasil's hydroelectric plants and SHP is carried out continuously through the monitoring of instruments installed on the civil structures, in addition to periodic visual inspections with the support of drones for submerged and aerial areas. This work is carried out by specialized technical staff, composed of civil engineers, hydrologists, topographers and technicians. Every two months, technical reports are issued on the consistency of the monitoring, validating the safety status of the structures. Among the measures taken, we highlight the real-time monitoring of all weather conditions and the affluence of the rivers that can impact the reservoirs, in addition to periodic assessments of the structures and control instruments. There are 54 meteorological stations distributed in the tributaries of the reservoirs so that it is possible to foresee behavior in flood situations. The verifications of the dams also include the use of drones to inspect aerial or submerged structures, in addition to visual inspections foreseen in specific procedures. In line with the provisions of Resolution number 696/2015 of the National Electric Energy Agency (Aneel), AES Brasil updates and forwards to the inspection agent the risk assessment form (FSB). Internal training of the procedure SOSEm (System of Operation in Emergency Situations) is also carried out, an emergency plan developed to act and restore normal operating conditions in situations of risk. Additionally, the company develops and distributes the Emergency Action Plan (EAP), a technical and administrative procedure that simulates the rupture of dams and the generation of flood spots, to assist civil defense agencies in the preparation of municipal contingency plans for evacuation and assistance to communities.

Cost of response

104700000

Explanation of cost of response

The cost of the answer inserted above refers to the 2022 budget for modernization and maintenance of plants and sluices.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	<p>AES Brasil manages the water resources used for energy production. It is important to explain that hydroelectric plants do not consume water, only use water to produce electricity, and this water returns to its natural course. Therefore, there is no impact on the quantity and quality of this natural resource</p> <p>AES Brasil's commercialization strategy aims to optimize the commercial margin of the company's integrated portfolio in order to mitigate the effects of hydrological risk on the bottom line. Through a joint action of the commercial and market intelligence teams, several measures are adopted to reduce the volatility of commercial margins and ensure an intelligent and more efficient energy allocation. In these analyses, due to the operation of the Energy Reallocation Mechanism (MRE), the hydrological scenarios of all the Brazilian basins are considered. Significant impacts in other generating companies participating in the MRE would have no significant impact on AES Brasil, since the sale of surplus energy to compensate the units below the physical guarantee would be diluted among all participants. That is, the increase in revenue for the company would be marginal.</p> <p>Considering the downstream chain, the customers served by AES Brasil may also suffer impacts related to water resources, either by the quality or quantity of water available. It is possible that these impacts would lead to pressure for cost optimization with other inputs, such as energy, expanding business opportunities for AES Brasil. Conversely, this same pressure could compromise the cash availability of customers, raising default rates. In any case, the company believes that these impacts (positive or negative from AES Brasil's point of view) would not be enough to significantly compromise contracts and revenues.</p> <p>Regarding the supply chain, AES Brasil relates mainly to companies for the maintenance of the generator park and specialized services. The greatest impact could be on the manufacturers of equipment used in the operational units, but is not considered relevant in the current scenario.</p>

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

The reported opportunity is related to the maintenance of the quality and quantity of water resources, and through this strategy of Conserving, protecting and preserving biodiversity through the recovery of riparian forest, with the reforestation of reservoir edges with the help of the Mãos na Mata Program, AES Brasil increases its efficiency for the production of electricity in its hydroelectric plants, because with the recovery of the clear forests, siltation is avoided on the banks of rivers beyond the importance for biodiversity, since this vegetation is used as shelter and food source for the fauna and in the creation of a microclimate that influences the dynamic balance of the ecosystem.

Aligned with the Biodiversity and Land Use Policy guidelines, in 2022 AES Brasil worked on the reforestation of the reservoirs margins through the Mãos na Mata Program. Through Mãos na Mata, in partnership with SOS Mata Atlântica and WeForest, AES Brasil drives reforestation actions by signing partnerships with other organizations. In this model, the company provides the planting area, seedlings, and the management expertise of its engineers and biologists, and relies on the investments of partners to multiply the scale and positive impacts of area recovery. Reforestation contributes to the preservation of springs, generating a positive impact for the entire region. In partnership with the National Center for Research and Conservation of Carnivorous Mammals (CENAP) from Chico Mendes Institute for Biodiversity Conservation (ICMbio), we promote projects to study and monitor two species listed among those endangered by the International Union for Conservation of Nature (IUCN): cougar and maned wolf.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

12254167

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

In 2022, the total expense for biodiversity projects activities was R\$ 12.3 million. This value is associated to the amount spent by AES Brasil in projects to study and monitor two species listed among those endangered and in Mãos na Mata Program for reforestation of the reservoirs margins. In the program ambit, 243.4 hectares were restored in 2022 and 1 million seedlings were produced. The goal is to recover 1,713 hectares of Atlantic Forest and Cerrado by 2029. One of the news was the joint work proposal with Federal University of São Carlos (UFSCar), in which two doctorate students of the institution started to work in the field, implanting scientific experiments, monitoring plantations, and assessing the best practices to promote ecological restoration.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

AES assumed, in its Sustainability Policy, the commitment to the conscious use of water, with greater focus on solar complexes, whose effectiveness in energy generation depends on regular cleaning of photovoltaic panels. Some innovations have been incorporated in order to further reduce consumption. An example is the use of robots that clean the plates

solar panels with lower water consumption, since 2021. This project has resulted in the reduction of 50% of water consumption for cleaning the solar panels. Additionally, there was a reduction of diesel consumption, since the robots run on batteries and do not depend on vehicles traction to clean.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

0

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

Prior to the implementation of this project, AES Brasil had to hire cleaning companies to keep the photovoltaic panels clean. This hiring entailed high costs for the company. In addition, the use of robots resulted in a 50% reduction in water consumption and an 85% reduction in diesel consumption in the solar complexes. These reductions also represent significant savings for the company.

AES Brasil has an estimate financial impact, however the information is confidential.

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Facility reference number

Facility 1

Facility name (optional)

Caconde HPP

Country/Area & River basin

Brazil	Parana
--------	--------

Latitude

-21.578055

Longitude

-46.627222

Located in area with water stress

Yes

Primary power generation source for your electricity generation at this facility

Hydropower

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

1350644.6

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

1350644.48

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0.11

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

1301466.09

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

1301466.09

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

49178.51

Comparison of total consumption with previous reporting year

Much lower

Please explain

"0" means no such withdrawals/discharge occurred.

AES Brasil withdraws water from Caconde HPP for energy generation, cooling equipment, and administrative activities. In 2022, the HPP recorded:

- Total water withdrawal was much higher against that of 2021: 1,350,644.60ML, in 2022 (724,787.55 ML in 2021), 86.35% higher.
- Total discharge was much lower against that of 2021: 1,301,466.09ML, in 2022 (626,023.21 ML in 2021), 107.822% higher.
- Total water consumption was: 49,178.51 ML, a decrease of 50.21% compared to 2021: 98,764.21 ML), in absolute values was much higher compared to the previous year.

The improved 2022 performance was due to water scarcity limiting operations in 2021. ONS (National Electric System Operator) dispatches and regulatory environment influence HPP operations. Administrative activities improved due to leak resolution. In 2022, with restored hydrological conditions, generation capacity, withdrawals, and discharges increased.

Definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%.

Facility reference number

Facility 2

Facility name (optional)

Limoeiro HPP

Country/Area & River basin

Brazil	Parana
--------	--------

Latitude

-21.625795

Longitude

-47.009366

Located in area with water stress

Yes

Primary power generation source for your electricity generation at this facility

Hydropower

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

1910686.76

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

1910684.8

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

1.96

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

1910566.21

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

1910566.21

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

120.55

Comparison of total consumption with previous reporting year

Much lower

Please explain

"0" means no such withdrawals/discharge occurred.

AES Brasil withdraws water from Limoeiro HPP for energy generation, cooling equipment, and administrative activities. In 2022, the HPP recorded:

-Total water withdrawal of 1,910,686.76 ML, 90.69% higher than 2021 (1,002,010.12 ML);

-Total discharge of 1,910,566.21 ML, 90.72% higher than 2021 (1,001,764.14 ML);

-Total water consumption was 120.55 ML (=withdrawals - discharges), - 104.71% lower than 2021 (245.98 ML).

Hydroelectric plants don't consume water, they just use water to produce electricity, and this water returns to its natural course. Hence, there is no impact on the quantity and quality of this natural resource.

The improved 2022 performance was due to water scarcity limiting operations in 2021. ONS (National Electric System Operator) dispatches and regulatory environment influence HPP operations. Administrative activities improved due to leak resolution. In 2022, with restored hydrological conditions, generation capacity, withdrawals, and

discharges increased.
Definition for change: About the same: < +/- 5%, Lower/Higher: > +/- 5%, Much lower/higher > +/- 20%.

Facility reference number

Facility 3

Facility name (optional)

Euclides da Cunha HPP

Country/Area & River basin

Brazil	Parana
--------	--------

Latitude

-21.603079

Longitude

-46.948998

Located in area with water stress

Yes

Primary power generation source for your electricity generation at this facility

Hydropower

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

2043670.96

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

2043670.12

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0.83

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

2043780.07

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

2043780.07

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

-109.11

Comparison of total consumption with previous reporting year

Much lower

Please explain

"0" means no such withdrawals/discharge occurred. AES Brasil withdraws water from Euclides da Cunha HPP for energy generation, cooling equipment, and administrative activities. In 2022, the HPP recorded:

Total water withdrawal: 2,043,670.96 ML, 88.48% higher than 2021 (1,084,276.77 ML); much higher.

Total discharge: 2,043,780.07 ML, 88.49% higher than 2021 (1,084,296.96 ML); much higher.

Total water consumption: -109.11 ML, -440.99% compared to 2021 (20.20 ML); much smaller. Consumption = captures minus discharges.

Hydroelectric plants don't consume water; they use it for electricity generation, returning it to the river. No impact on quantity/quality of this resource.

The improved 2022 performance was due to water scarcity limiting operations in 2021. ONS dispatches and regulatory environment influence HPP operations.

Administrative activities improved due to leak resolution. In 2022, with restored hydrological conditions, generation capacity, withdrawals, and discharges increased.

Change definition: About the same: <5%, Lower/Higher: >5%, Much lower/higher >20%. This threshold applies to future trends.

Facility reference number

Facility 4

Facility name (optional)

Salinas

Country/Area & River basin

Brazil	Other, please specify (East Brazil South Atlantic Coast - Apodi)
--------	--

Latitude

-4.974683

Longitude

-36.91795

Located in area with water stress

Yes

Primary power generation source for your electricity generation at this facility

Wind

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

0.9

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0.05

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0.04

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

0.07

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0.07

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

0.02

Comparison of total consumption with previous reporting year

About the same

Please explain

Wind complexes do not have water intake or discharge. The water consumed only for administrative activities comes mainly from tanker trucks or water withdrawals that are not significant in terms of volume.

Yet this is located in a water stress area, the site is not exposed to any water risk that could generate a substantive change in AES' business, operations, revenue or expenditure.

In 2022, the amounts withdrawal and discharged remained about the same as in the previous year.

Change definition: About the same: <5%, Lower/Higher: >5%, Much lower/higher >20%.

Facility reference number

Facility 5

Facility name (optional)

Ventus

Country/Area & River basin

Brazil	Other, please specify (East Brazil South Atlantic Coast)
--------	---

Latitude

-5.1027

Longitude

-36.188183

Located in area with water stress

Yes

Primary power generation source for your electricity generation at this facility

Wind

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

0.21

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0.18

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0.03

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

0.17

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0.17

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

0.04

Comparison of total consumption with previous reporting year

About the same

Please explain

Wind complexes do not have water intake or discharge. The water consumed only for administrative activities comes mainly from tanker trucks or water withdrawals that are not significant in terms of volume.

Yet this is located in a water stress area, the site is not exposed to any water risk that could generate a substantive change in AES' business, operations, revenue or expenditure.

In 2022, the amounts withdrawal and discharged remained about the same as in the previous year.

Change definition: About the same: <5%, Lower/Higher: >5%, Much lower/higher >20%.

Facility reference number

Facility 6

Facility name (optional)

Mandacaru

Country/Area & River basin

Brazil	Other, please specify (East Brazil South Atlantic Coast - Aracatiacu)
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Latitude

-21.603079

Longitude

-46.948998

Located in area with water stress

Yes

Primary power generation source for your electricity generation at this facility

Wind

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

5.03

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

5.03

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

4.02

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

4.02

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

1

Comparison of total consumption with previous reporting year

About the same

Please explain

Wind complexes do not have water intake or discharge. The water consumed only for administrative activities comes mainly from tanker trucks or water withdrawals that are not significant in terms of volume.

Yet this is located in a water stress area, the site is not exposed to any water risk that could generate a substantive change in AES' business, operations, revenue or expenditure.

In 2022, the amounts withdrawal and discharged remained about the same as in the previous year.

Change definition: About the same: <5%, Lower/Higher: >5%, Much lower/higher >20%.

W5.1a

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

% verified

76-100

Verification standard used

Water withdrawal data – volume per source, presented by Hydroelectric Plant in question 5.1 were verified by the National Electric System Operator (ONS) for coordination and control of the National Interconnected System (SIN) operations and dispatch of hydroelectric plants operations, which manages according to the affluence scenario.

As for water withdrawal data – volume per water source used in administrative activities involving sanitary uses (cleaning, toilets, and gardening), and cleaning of photovoltaic panels, verification of results was made by: i) auditors during ISO 14001 audit, by sampling; ii) National Water Agency (ANA) and environmental bodies through presentation of monitoring reports to meet licensing and/or legislation in force constraints; and iii) Those informed in AES Brasil 2022 Sustainability Integrated Report were verified by KPMG Auditores Independentes Ltda auditors.

Standards adopted:

- Federal Law 9.433 (item VIII, of art. 35,) that grants the use of water resources for purposes of electric energy generation;
- ISO 14001;
- CONAMA Resolution 357/05 for Class 2 water, amended by CONAMA 410 and 430;
- Global Reporting Initiative – GRI Standards for Sustainability Report.

Please explain

<Not Applicable>

Water withdrawals – volume by source

% verified

76-100

Verification standard used

Water withdrawal data – volume per source presented for each Hydroelectric Plant in question 5.1 were verified by the National Electric System Operator (NOS), for coordination and control of operations in the National Interconnected System (SIN) for dispatch of hydroelectric plants' operations, whose management is made according to the affluence scenario.

As for water withdrawal data – volume per water source used in administrative activities involving sanitary uses (cleaning, toilets and gardening) and cleaning of photovoltaic panels, verification of results were conducted by i) auditors during ISO 14001 audits, by sampling; ii) National Water Agency (ANA) and environmental bodies through presentation of monitoring reports to meet licensing and/or legislation in force constraints; and iii) Those informed in AES Brasil 2022 Sustainability Integrated Report were verified by KPMG Auditores Independentes Ltda.

Standards adopted:

- Federal Law 9.433 (item VIII, of art. 35,) that grants the use of water resources for purposes of electric energy generation;
- ISO 14001;
- CONAMA Resolution 357/05 for Class 2 water, amended by CONAMA 410 and 430;
- Global Reporting Initiative – GRI Standards for Sustainability Report

Please explain

<Not Applicable>

Water withdrawals – quality by standard water quality parameters

% verified

76-100

Verification standard used

Water withdrawal data – quality per standard quality parameters of the water used in administrative area involving sanitary uses (cleaning, toilets and gardening) and cleaning of photovoltaic panels, results verification was conducted by i) auditors during ISO 14001 audits, by sampling; ii) National Water Agency (ANA) and environmental bodies through presentation of monitoring reports to meet licensing and/or legislation in force constraints; and iii) Those informed in AES Brasil 2022 Sustainability Integrated Report were verified by KPMG Auditores Independentes Ltda.

Standards adopted:

- ISO 14001;
- CONAMA Resolution 357/05 for Class 2 water, amended by CONAMA 410 and 430;
- Global Reporting Initiative – GRI Standards for Sustainability Report

Please explain

<Not Applicable>

Water discharges – total volumes

% verified

76-100

Verification standard used

Water discharge data – total volumes recorded per Hydroelectric Plant in question 5.1 were verified by the National Electric System Operator (NOS), for coordination and control of operations in the National Interconnected System (SIN) for dispatch of hydroelectric plants' operations, whose management is made according to the affluence scenario.

As for water discharge data – total volumes of water used in administrative activities involving sanitary uses (cleaning, toilets and gardening) and cleaning of photovoltaic panels, verification of results were conducted by i) auditors during ISO 14001 audits, by sampling; ii) National Water Agency (ANA) and environmental bodies through presentation of monitoring reports to meet licensing and/or legislation in force constraints; and iii) Those informed in AES Brasil 2022 Sustainability Integrated Report were verified by KPMG Auditores Independentes Ltda.

Standards adopted:

- Federal Law 9.433 (item VIII, of art. 35,) that grants the use of water resources for purposes of electric energy generation;
- ISO 14001;
- CONAMA Resolution 430/11;
- Global Reporting Initiative – GRI Standards for Sustainability Report

Please explain

<Not Applicable>

Water discharges – volume by destination

% verified

76-100

Verification standard used

Water discharge data –volume per destination, presented per Hydroelectric Plant in question 5.1 were verified by the National Electric System Operator (ONS), for coordination and control of operations in the National Interconnected System (SIN) for dispatch of hydroelectric plants' operations, whose management is made according to the affluence scenario.

Technical reports of analyses for verification of water discharges - volume per destination of reservoirs in hydroelectric plants and effluent treatment plants (compact ETP), and oil and grease separator are verified by i) auditors during ISO 14001 audits, by sampling; ii) National Water Agency (ANA) and environmental bodies through presentation of monitoring reports to meet licensing and/or legislation in force constraints.

Standards adopted:

- Federal Law 9.433 (item VIII, of art. 35,) that grants the use of water resources for purposes of electric energy generation;
- ISO 14001;
- CONAMA Resolution 430/11;
- Global Reporting Initiative – GRI Standards for Sustainability Report Report

Please explain

<Not Applicable>

Water discharges – volume by final treatment level

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

Technical reports of analyses for verification of water discharges - volume per level of final treatment in reservoirs of hydroelectric plants and effluent treatment plants (compact ETP), and oil and grease separator are verified by i) auditors during ISO 14001 audits, by sampling; ii) National Water Agency (ANA) and environmental bodies through presentation of monitoring reports to meet licensing and/or legislation in force constraints.

Water discharges – quality by standard water quality parameters

% verified

76-100

Verification standard used

Water discharge data – quality per standard quality parameters of the water used in administrative activities involving sanitary uses (cleaning, toilets and gardening) and cleaning of photovoltaic panels, results verification was conducted by i) auditors during ISO 14001 audits, by sampling; ii) National Water Agency (ANA) and environmental bodies through presentation of monitoring reports to meet licensing and/or legislation in force constraints.

Standards adopted:

- ISO 14001;
- CONAMA Resolution 430/11;
- Global Reporting Initiative – GRI Standards for Sustainability Report

Please explain

<Not Applicable>

Water consumption – total volume

% verified

76-100

Verification standard used

Water consumption data – total volume recorded per Hydroelectric Plant in question 5.1 were verified by the National Electric System Operator (ONS), for coordination and control of operations in the National Interconnected System (SIN) for dispatch of hydroelectric plants' operations, whose management is made according to the affluence scenario.

As for data on water consumption – total volume of water used in administrative activities involving sanitary uses (cleaning, toilets and gardening) and cleaning of photovoltaic panels, results verification was conducted by i) auditors during ISO 14001 audits, by sampling; ii) National Water Agency (ANA) and environmental bodies through presentation of monitoring reports to meet licensing and/or legislation in force constraints; and iii) Those informed in AES Brasil 2021 Sustainability Integrated Report were verified by KPMG Auditores Independentes Ltda.

Standards adopted:

- Federal Law 9.433 (item VIII, of art. 35,) that grants the use of water resources for purposes of electric energy generation;
- ISO 14001;
- CONAMA Resolution 357/05 for Class 2 water, amended by CONAMA 410 and 430;
- Global Reporting Initiative – GRI Standards for Sustainability Report

Please explain

<Not Applicable>

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

Row	Scope	Content	Please explain
1	Company-wide	Description of the scope (including value chain stages) covered by the policy Description of business dependency on water Description of business impact on water Commitment to prevent, minimize, and control pollution Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Commitment to stakeholder education and capacity building on water security Commitment to water stewardship and/or collective action Commitments beyond regulatory compliance Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	The Sustainability and Biodiversity and Land Use Policies are applied to all employees and suppliers of AES Brasil and its subsidiaries and have as guidelines for efficiency in biodiversity conservation: i) Manage risks and vulnerabilities in water use aiming at adaptation to climate changes; ii) Monitor water quality in the Company's reservoirs, ensuring safety and adequacy to the multiple uses given to the area by the company and nearby communities; and iii) Keep follow-up of indicators associated to water consumption using the Environmental Management System. With the monitoring analyses' results, the company can assess the environmental impact. AES Brasil has a Sustainability Policy, in line with AES Corporation's Environmental Policy, which establishes expectations and principles of sustainable management in direct operations. The Policy is applicable to all environmental matters, including water, and establishes the commitment to meet or exceed regulations and seek improvements, in addition to formalizing the alignment with the 2030 Agenda. The Policy is the basis of all corporate environmental standards, covering topics from general requirements to the prevention of spills in areas with high risk to water and to the reservoir of hydroelectric plants. In addition, the company makes explicit in its Biodiversity and Land Use Policy guidelines for the management of risks and vulnerabilities in the use of water, especially in the context of adaptation to climate change. Both documents are publicly disclosed on the institutional website, in the Sustainability section, and on the Investor Relations website, in the Policies and Regulations section. These sections also provide other AES Brasil policies and commitments, in addition to the Sustainability Report, prepared annually in accordance with the guidelines of the Global Reporting Initiative (GRI) and Integrated Reporting (IIRC). Politicabiodiversidade.pdf PoliticadeSustentabilidade.pdf

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual or committee	Responsibilities for water-related issues
Board-level committee	<p>The company's board of directors and executive board are responsible for the company's sustainable growth strategic implementation. Targets of sustainable growth are included in the variable remuneration program of these executives. This growth plan refers to the company growth in renewable energy, mainly wind energy, which has made the company, already fully renewable, even more resilient, with diversified portfolio, and less dependent on water sources. In 2021 the board of directors approved 2030 ESG Commitments, which include: contribute to the energy transition by increasing renewable sources in the Brazilian electricity matrix; positively impact climate change mitigation efforts; and conserve, protect and preserve biodiversity. AES Brasil has a Sustainability Committee as one of the advisory bodies to the Board of Directors. This Committee is chaired by the CEO of the company and includes the participation of other directors of AES Brasil, the chairman of the Board of Directors, an independent member of the Board of Directors and an external expert member. At least every six months, according to the internal regulations, the Sustainability Committee reports to the Board of Directors on the recommendations and activities performed by the Committee.</p> <p>The purpose of this Committee is to support the Board of Directors in integrating sustainability into the entire management and governance process, proposing a strategy of action and the goals to be achieved, as well as following up on the execution of initiatives to generate value and monitor the positive and negative impacts on the economic, social and environmental dimensions. Since 2017, the Sustainability Committee includes a forum especially dedicated to climate change, the Climate Change Subcommittee, which is led by the company's COO.</p>
Board-level committee	<p>In 2021 the executive board approved the business risks that are monitored through Heatmap and submitted periodically to the Statutory Audit Committee which is an advisory committee of the Board of Directors to fulfill various responsibilities, such as: it has a role of supervision of the internal control system and risk management of AES Brasil. Mitigating plans and actions to reduce risks related to water security and climate change were also defined. The body meets the governance requirements of the New Market, a segment of the B3 (São Paulo stock exchange) that brings together companies with the best and most transparent shareholder relations practices. The body meets monthly and has, among other attributions, the responsibility of supervising the risk control and management systems, monitoring the effectiveness and sufficiency of the respective structures, as well as the quality and integrity of its processes, proposing the necessary actions to the Board of Directors.</p> <p>At the company, the corporate risk management process is guided by the Risk Management Policy. The risks are assessed as to probability and impact, classified into ten categories and consolidated in the risk matrix (Heat Map). Among the strategic risks, AES Brasil identified the risk of climate change, which includes the assessment and mitigation actions for aspects such as water availability (precipitation and river inflow), chronic imbalances caused by climate change (wind regime and solar incidence) and extreme weather events.</p> <p>The CAE has an annual work plan, with an agenda to periodically address all the issues under its responsibility. The evaluation of the Heat Map and respective mitigation plans occurs at least quarterly. After its creation, the CAE held an evaluation meeting of the Heat Map in June 2021.</p>
Chief Operating Officer (COO)	<p>The Chief Operating Officer at AES Brasil oversees, among other, the implementation of policies such as the Sustainability and the Biodiversity and Land Use inside AES' operations. The person on that position, who is also a current member of the Sustainability Committee, is responsible for making decisions that aim, within the context of electricity generation operations, to control, flows and effluents, as well as water withdrawals, for example. Similarly, it is also responsible for ensuring the quality of water in the reservoirs.</p> <p>In 2022, as disclosed in our 2022 Annual Sustainability Report, AES Brasil needed to execute a maneuver operating at the Small hydroelectric Power Plant Mogi, in Mogi Guaçu, São Paulo. A vessel, which works like floating scissors, mechanically removed an exotic species of macrophyte that had proliferated in the plant's reservoir. The operation involved decision-making and monitoring by the director, also ensuring the involvement of relationship segments that use the reservoir for navigation and water supply.</p>

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	<ul style="list-style-type: none"> Monitoring implementation and performance Overseeing acquisitions, mergers, and divestitures Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing innovation/R&D priorities Setting performance objectives 	<p>The Sustainability Committee meetings take place quarterly, by ordinary call. At all meetings, topics related to AES Brasil's performance in water resources and the climate agenda are discussed.</p> <p>The meetings have as a recurring agenda the evaluation of indicators and the monitoring of action plans and initiatives aimed at reduction opportunities. Specific themes can be included by the areas.</p> <p>Annually, the Sustainability Committee approves the Sustainability Report (in accordance with the GRI Standards and the Integrated Reporting framework) and the Aneel Social and Environmental Responsibility Report. The documents are also validated by the Board of Directors and the Fiscal Council.</p>

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	The criterion adopted to assess the board member competence in climate changes is the board member experience in relevant forums on the theme. In the AES Brasil case, the board member with such competence is member of advisory boards of institutions directly associated to the theme, like WRI (World Resources Institute). Another criterion adopted to assess the board member competence in climate changes is his/her experience in leading carbon-intensive companies. In this case the board member was CEO at Alcoa for several years. The board member has degree from Fundação Getúlio Vargas' São Paulo School of Business Administration and obtained his MBA at IMD Program, in Lausanne. He started his professional career as consultant — Adela, Technomic, Booz, Allen & Hamilton — and later worked as business leader through a relationship with Alcoa that covers over twenty years, and in the last ten years he worked as Regional CEO for Latin America and Caribbean. Prior to this position, he worked as Financial Director for the region and, seated in New York, he was responsible for company's global financial planning and analysis. He is currently member of the Advisory Boards or Administrative Boards of five organizations — Ethos Institute, WRI Brasil (World Resources Institute), Sitawi-Finanças para o Bem, Unigel S.A. and Companhia Brasileira de Alumínio-CBA. In the last 5 years, the board member was not subject to any criminal conviction, or conviction in CVM (Security Commission) administrative process, or any other unappealable conviction at judicial or administrative level, that could have suspended or disabled the practice of professional or commercial activity.	<Not Applicable>	<Not Applicable>

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

President

Water-related responsibilities of this position

- Assessing future trends in water demand
- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities
- Integrating water-related issues into business strategy

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

The CEO is primarily responsible for conducting business to ensure the execution of the company's strategy and the achievement of its objectives. The company's main strategic objective is directly to climate and water issues, since, to remain a 100% renewable energy generation company, it is necessary to assess and manage water risks and opportunities that impact the energy generation and company's portfolio.

The CEO is president of the Sustainability Committee and is responsible for formally advising the Board of Directors on the analysis of topics related to sustainable development.

On a monthly basis, AES Brasil presents to the Board of Directors the business overview in which it details the performance related to water issues, including the hydrological scenario, the precipitation of the month and accumulated, inflows, storage, level of hydroelectric reservoirs and future prospects.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	100% of the company's executive board members adopt Green Growth target that considers business growth in the coming years, only with renewable energies in their incentive plans (short, medium and long terms). The 2030 ESG Commitments and targets are also contemplated in the variable remuneration of board and management members. AES Brasil has monetary incentives for leadership related to operational performance indicators. In the case of the 12 hydroelectric generating units, the dependence on adequate levels of affluence for energy generation above the physical guarantee is essential to achieve results and protect against hydrological risk. Indicators of availability of assets and achievement of physical guarantee affect the variable remuneration of the Executive Board.

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization's water commitments	Please explain
Monetary reward	Corporate executive team Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Operating Officer (COO) Chief Risk Officer (CRO) Chief Sustainability Officer (CSO) Other, please specify (All employees)	Improvements in wastewater quality – direct operations Other, please specify (Increase of non-water renewable energy generation)	The incentive is essential to achieve the strategic objectives of increasing the company's non-hydro renewable matrix and reducing dependence on water resources, as it engages executives and employees in leading prospecting and construction of new assets. In addition, it is related to the commitments of the Biodiversity policy to reduce the impact on biodiversity and aquatic ecosystems. Although water sources are renewable and have a favourable energy matrix in Brazil, it is known that they have environmental impacts that other renewable sources such as wind and solar do not have.	AES Brasil has monetary incentives for leadership related to operational performance indicators such as Water intensity m ³ /GWh. In the case of the 12 hydroelectric generating units, the dependence on adequate levels of affluence for energy generation above the physical guarantee is essential to achieve results and protect against hydrological risk. Indicators of availability of assets and achievement of physical guarantee affect the variable remuneration of the Executive Board. Additionally, the Executive Board and the CEO have target related to ESG, including the growth of renewable energy generation. In 2022, the CEO's variable compensation, in particular, had the following breakdown: 40% of the CEO's variable compensation was linked to ESG criteria, divided into: 5% Diversity 5% Organizational climate 30% Growth in renewables. The timeframe of the performance indicators is linked to the achievement of annual targets, linked to the 2030 ESG commitments.
Non-monetary reward	No one is entitled to these incentives	<Not Applicable>	<Not Applicable>	AES Brasil does not offer recognitions, internal awards or other non-financial rewards related to water practices or indicators.

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, other

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

AES Brasil participates in basin committees (collegiate made up of representatives of civil society, water users and civil entities, and public authorities, which can have both deliberative and advisory roles), in addition to discussing in working groups of sectorial entities like the Brazilian Association of Electricity Generator Companies and common challenges in the management of water resources, impacts, risks and opportunities.

AES Brasil has a Sustainability Policy, with guidelines on water resources, like regular communication of environmental performance to internal and external publics. The document also indicates specific channel for denunciation of incompatibilities, inconsistencies or divergences in practices adopted against the guidelines established by regulation. Moreover, by means of permanent work by the Sustainability Committee, the different areas' efforts to interact with external agents, like representative entities and multi-sector organizations are aligned and monitored. Another highlight is the Biodiversity and Land Use Policy, with guidelines for management of risks and vulnerabilities in water use; monitoring of water quality, and keeping follow-up of indicators associated to water consumption.

If practical inconsistencies are detected, it is initiate internal evaluation with the responsible areas, the information will be reported periodically to the Sustainability Committee for monitoring of corrective actions until they have been resolved.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	AES Brasil's strategic planning cycle is revised annually based on guiding pillars: being the customer's best choice in the free energy market; resilience; responsibility; and competitiveness. Strategic planning considers a 5-year time horizon and serves as the basis for the annual budget. AES Brasil aligns responsibility and efficiency to promote growth with sustainable development aiming at promoting added value for its shareholders from the Diversification of the generation portfolio through the inclusion of complementary energy sources, increasing its installed capacity to 6 GW, from 43% to 55% the current installed capacity by non-water source with the complementarity of renewable sources increasing resilience and resilience competitiveness of its portfolio.. The Company annually evaluates the framing of its units in areas with water stress, using the Aqueduct Risk Atlas tool. In 2022, three HPPs (Caconde, Limoeiro and Euclides da Cunha, all in SP) and four wind farms (Alto Sertão II, Salinas, Ventus and Mandacaru), representing 30% of the company's facilities, were located in regions with high or extremely high overall water risk. Water-related issues are integrated to AES's Materiality assessment and to its 2030 ESG Commitments, mainly through the goal established to increase reforestation by at least 20% in addition to the commitment to recover occupied areas, directly impacting the water cycle and to the preservation of the natural flows of the bodies of water.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	In addition to diversifying its portfolio into non-hydro sources, AES Brasil invests in long-term bilateral contracts that make greenfield projects viable and contribute to predictable financial returns. This is mainly for wind projects, moving towards a low-carbon economy and reduced water risk exposure. AES is increasing its presence in Brazil's Northeast, a region known for the high wind incidence. Recently, the company focused its investments in this region, and, in 2022, acquired assets in the states of Piauí and Pernambuco, adding to wind farms in the states of Bahia, Ceará and Rio Grande do Norte. The company expanded its efforts in 2022 to maintain and ensure safety in greenfield wind farm projects. Monthly, AES Brasil presents to the Board of Directors the business overview, detailing performance related to water issues, the hydrological scenario, the precipitation of the month and accumulated, inflows, storage, level of hydroelectric reservoirs and future prospects. With this, it monitors the actions to achieve long-term objectives of its Strategy. Regarding Biodiversity, the strategy to achieve the goals related to the strategic planning has been increasing investments in environmental business impact management: in 2022, 253.9 hectares of Atlantic Forest and Cerrado were restored, and R\$18.3 million invested in environmental programs, among which aquatic wildlife protection programs and partnerships with universities for development of research projects.
Financial planning	Yes, water-related issues are integrated	5-10	AES Brasil performs financial planning where water issues, considering unfavorable future hydrological scenarios, due to the Brazilian electric sector, underwent several changes that affected water source electricity generation operations. To reduce this dependence on water in direct operations, AES Brasil's strategy is the diversification of its energy generation matrix with renewable, non-hydroelectric sources, investing in solar and wind sources. That can be demonstrated with the 15% reduction in two years of the water source installed capacity, which went from 75% in 2020 to 64% in 2022; and according to installed capacity estimated considering pipeline for expansion of energy production to 6.8 GW, energy generation with water source will reduce 38%, starting to represent 39% of AES Brasil energy matrix, while wind energy will represent 51% of the total energy produced, and solar energy will be 10%. Therefore, the company, in the future, will count on 61% of energy production from sources other than water, expanding alternatives of supply of new products and services for customers with diversified consumption profiles. Given the above the diversification of its energy matrix expanding to non-water sources is one of AES Brasil's strategies in the strategic business plan to reduce the risk that the Brazilian electric system is subject to hydrological conditions and the risk of energy scarcity and maintain balance in its financial planning.

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

41.57

Anticipated forward trend for CAPEX (+/- % change)

-47.43

Water-related OPEX (+/- % change)

18

Anticipated forward trend for OPEX (+/- % change)

Please explain

AES Brasil considered Capex for maintenance and modernization of water assets to calculate the year-on-year change.

In 2022, R\$115.1 million was invested, +41.57% compared to the R\$81.3 million invested in 2021. The increase reflects the modernization of hydroelectric plants due to investments postponed in 2021 on account of the water crisis, as disclosed in the 4Q22 Results.

For 2023, a decrease of 47.43% in the maintenance and modernization is expected, totalling R\$60.5 million (out of the 159 total for modernization and maintenance, as disclosed in the 1Q23 Results).

For OPEX, operating costs and expenses totaled R\$535.3 million, an increase of 18% over 2021 (R\$453.7 million). The increase is related mainly to non-recurring expenses such as the biennial maintenance of locks that was carried out in 2022. In line with the good transparency practices of B3's Novo Mercado, AES Brasil does not disclose guidance on future operational and financial results.

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	Yes	AES Brasil annually runs a Multiple Visions of the Future (MVF) process, evaluating scenarios for 20 years to forecast their impacts on the business. It includes climate projections and possible trends of the energy market, technologies, regulation and other factors are also included. The results are used for strategic planning and to test the resilience of the strategy in different scenarios, price conditions and investments. The Board of AES Corporation is responsible for approving the MVF and a summary is presented to all employees, in order to disseminate knowledge internally and engage everyone. Since 2021, AES has been developing, with two consulting firms, studies to estimate the economic impact of climate change on the generation of energy. The studies focus on applying IPCC models to AES's assets (operational and planned), assessing acute and chronic climate risks. Also, there is a Hydrological Model and operative flexibility analysis of hydroelectric plants.

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related Climate-related	<p>Made by AES Corporation, our parent company, we selected internationally recognized, third-party climate scenarios to stress test the resilience of our portfolio, as scenarios developed by the International Energy Agency and the Intergovernmental Panel on Climate Change (IPCC) for physical risk (IPCC AR5; RCP 2.6 & 6.0). The stress test was conducted over the projected time period of 2020 to 2040 and includes all of AES' businesses and global assets, both current and anticipated, included AES Brasil. The stress test includes varying growth trajectories for building new renewable energy assets and future growth in our asset-light product lines.</p> <p>The transition risk analysis of AES Corporation focus on the potential impact of carbon policies and other changes in the electricity market associated with the low-carbon transition. The key third-party variables considered: power, fuel and carbon prices, regional electricity market dynamics & the potential for energy efficiency and demand side response. Also includes AES-specific assumptions so our modeling approach enables us to assess our profitability at an individual asset and product line level to identify areas of risk, and where we are positioned for growth. We also consider expected asset retirement and potential divestment scenarios, our ownership structure for different assets, market share and margin considerations across our product lines.</p> <p>The physical risk analysis, made by AES Corporation, expands upon the 2018 approach by incorporating additional weather and climate peril datasets. The stress test assesses how a changing climate affects the risk exposure of our current and future assets. Scenarios are both quantitative & qualitative.</p> <p>The analysis performed on the context of the climate modelling consulting project is based on scenarios SSP2-4.5 and SSP3-7.0, considering different factors (as they are applied for each type of asset – e.g.: for wind and solar plants, wind and radiation factors are considered, and, for hydroelectric power plants, water availability). The analyses were performed for five types of climate threat – meteorological drought, heat waves, forest fire, and landslides, for the time horizons of 2030 and 2050. The objective of this project is to estimate the economic impact of climate change on the generation of renewable energy to build a more resilient electrical system.</p>	<p>As part of the 2DS scenario analysis conducted by AES Corporation, 3 scenarios were chosen to test AES Brasil's portfolio against climate-related changes in policy, technology and physical risks. The main impact is related to hydrological risk: lower precipitation and affluence levels may reduce generation and increase costs to purchase electricity in the short term market to comply with contracts of AES Brasil. The climate modelling consulting project concluded that 12 hydro assets analysed, are at a high risk of meteorological drought, for both scenarios and time horizons, and most of them are at a high risk of forest fires, especially on scenario SSP2-4.5. The risks of flood and landslides are small or medium.</p> <p>It was also projected an annual revenue estimate for each of the 2 scenarios. Considering the increase of extreme weather events in the future, the risk of meteorological drought may affect the generation capacity of the water assets and there is also a greater probability of increasing generations capacity due to the increase of affluence, related to rainfall.</p> <p>For 2030, the estimated annual revenues for all water resources in scenarios 1 and 2 are respectively 55% and 52% higher than in the baseline. The baseline was calculated based on the last 10 years of water inflow, energy generation and revenue, and the average annual result was R\$ 1,680.20 million reais, for all assets - with a significant difference among the assets, according to their capabilities.</p>	<p>AES Brasil has a Weather Risk Committee, which daily monitors projections for this risk and takes protective measures. The main response to this risk is the adoption of strategies for contracting the portfolio, which allow establishing an energy reserve that avoids a possible purchase in the MRE. AES Brasil has a growth plan focused on the diversification of its portfolio through the development of projects in sources complementary to hydro and with long-term contracts and consistent returns.</p> <p>As part of our growth strategy on non-water renewable energy generation, AES acquired, on November 2022, three wind complexes: Ararape, Caetés and Cassino. Together, they represent 456 MW of wind operating capacity. In addition to this acquisition, and considering our 2023-2027 Investment Plan, our response timeline comprises the R\$3.1 billion investment in the expansion of contracted projects and construction plans already defined, especially for Wind Complexes Tucano and Cajuina and in the pipeline development of Cajuina Wind Complex, and modernization and maintenance of operating assets .</p> <p>The results of the modelling project for the hydroelectric plants were ready at the end of 2022 and the strategies are still being drawn up. However, we understand that the portfolio development strategies already in force are in line with the results of these modelling analyses carried out, since they consider the expansion based on matrix diversification.</p>

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

Yes

Please explain

There is Financial Compensation tax for the Use of Water Resources for Hydroelectric Generation (CFURH), which is paid by the electric sector since 1990, according to Decree N° 3.739/ 2001., which provides for the reference updated tariff calculation for financial compensation for the use of water resources. According to the National Electric Energy Agency, the Reference Updated Tariff (TAR) calculation prices the energy generated for purposes of Financial Compensation for Water Use, and Art. 1 of the decree mentions the total value of the energy produced for purposes of the financial compensation addressed in art. 1st of Law 8.001/1990, will be obtained by the water source energy product effectively verified, measured in megawatt-hour, multiplied by the Reference Updated Tariff – TAR, set by the National Electric Energy Agency – ANEEL. In 2021, TAR value was R\$ 76.00/MWh, with 4.55% reduction against that of 2020 (R\$ 79.62/MWh).

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	Yes	36% of AES Brasil products are from wind and solar sources.	<Not Applicable>	<p>In 2022, AES Brasil had 36% of its current operational installed capacity from sources other than water sources, with ongoing plans to further balance this set of assets. With the completion of Cajuina and Tucano Wind Farms, AES will have 49% of installed capacity from wind and solar sources.</p> <p>AES's strategy was built to lead the Brazilian electric sector transformation, with the modernization of its segment and the opening of the free market, which allow customers to choose more sustainable solutions in the purchase and consumption of energy. Furthermore, the company operations do not impact water availability or quality, AES' criteria used for the definition of whether a service is low or high impact. Energy generation in hydroelectric power plants only influences the flow of rivers, since the water resources are dammed to drive the energy-generating turbines. The entire volume that passes through the turbines is returned to the system with equal or higher quality.</p>

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	No, and we do not plan to within the next two years	Our operations do not cause impacts on the availability of water in the regions where we operate. A hydroelectric power generation influences only the flow of rivers, since water resources are dammed to drive the turbines power generators. All the volume passing through the turbines is returned to the system with equal or superior quality registered at the entrance. So, there is no generation of pollutants resulting from the company's activities. However, we have carried out activities to monitor environmental conditions, as part of the regulations in which our operations are inserted. Among these activities are limnological monitoring, reservoir trophic degree monitoring and the water quality index. And, if there are any oil leaks at the plants, this effluent is directed to the water and oil separator system and drainage well as containment barriers. We monitor the separators every six months to meet the legislation parameters.
Water withdrawals	No, and we do not plan to within the next two years	Since the total volume captured for energy generation through our turbines returns to nature in its entirety, the company does not consider setting targets related to the reduction of water withdrawal to be a material issue.
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	Although we calculate and monitor the volumes captured monthly, and annually promote awareness internal campaigns, we do not have targets related to reduction of water consumption. Our water consumption is relatively low, which was proven by a benchmarking at the end of 2022, carried out with four other companies of the energy/utilities sector. The absolute consumption of water by AES Brasil in relation to the average of these four companies is extremely low. For this reason, we do not consider this to be a material topic to be broken down into internal goals.
Other	Yes	<Not Applicable>

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number

Target 1

Category of target

Watershed remediation and habitat restoration, ecosystem preservation

Target coverage

Basin level

Quantitative metric

Improvement in health of water-related ecosystems over time

Year target was set

1999

Base year

2000

Base year figure

0

Target year

2030

Target year figure

6408

Reporting year figure

243.9

% of target achieved relative to base year

Target status in reporting year

Underway

Please explain

The Company promotes in partnership with SOS Mata Atlântica reforestation activities and actions through the establishment of partnerships with other organizations. In this program, AES Brasil has as counterpart to cede the planting area, seedlings and management expertise of its environmental technicians and relies on the investments of its partners to multiply the scale and positive impacts on the recovery areas.

The objective of the Hands in the Forest Program is to conserve the flora by assisting in the supply of groundwater and minimizing erosion and silting of reservoirs. The success of the initiative is guaranteed by the Hands in the Forest Program, which works with the surrounding communities in forest restoration and supports projects for the recovery of springs and other Permanent Preservation Areas in the hydrographic basins where the reservoirs of AES Brasil hydroelectric plants are located.

Target reference number

Target 2

Category of target

Watershed remediation and habitat restoration, ecosystem preservation

Target coverage

Basin level

Quantitative metric

Improvement in health of water-related ecosystems over time

Year target was set

2022

Base year

2022

Base year figure

0

Target year

2030

Target year figure

352.5

Reporting year figure

10

% of target achieved relative to base year

Target status in reporting year

New

Please explain

In 2022, AES committed itself even more to the theme and implemented another reforestation related goal. Target 2 is to, by 2030, increase reforestation by at least 20% beyond the commitment to recover the occupied areas.

The commitment recovery (Target 1) refers to reforestation 6,408 hectares, and the partial target, from 2022 to 2030, is of 1,714 ha. – 20% of 1,714 equals to 352.50, our target year figure.

In addition to the 243.9 hectares reforested in 2022 (part of our underway efforts to Target 1), our investment in biodiversity projects allowed the reforestation of plus 10 hectares.

The activities are run with the partnership with SOS Mata Atlântica through the establishment of partnerships with other organizations, following the same operating processes and logic as Target 1.

And, such as Target 1, the success of the initiative is guaranteed by the Hands in the Forest Program, which works with the surrounding communities in forest restoration and supports projects for the recovery of springs and other Permanent Preservation Areas in the hydrographic basins where the reservoirs of AES Brasil hydroelectric plants are located.

This goal and commitment were approved at the end of 2021 by the Board of Directors.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

W9.1a

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	SASB electric utilities & power generators 2018: Water management	ASAE3000	Our sustainability report including water data has been verified by KPMG.
W7 Strategy	STRATEGY CHAPTER OF OUR SUSTENAIBAILITY REPORT	ASAE3000	Our sustainability report including our strategy has been verified by KPMG.
W8 Targets	OUR SUSTAINABILITY COMMITMENTS FOR 2030	ASAE3000	Our sustainability report including ESG targets has been verified by KPMG

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Value chain stage	Please explain
Row 1	Not mapped – and we do not plan to within the next two years	<Not Applicable>	Our business is not related to production or plastic use. Therefore, our company do not assess the potential environmental and human health impacts for plastic use. Nowadays, this theme is treated on our direct operations, within our waste management approach. We held several campaigns during 2022 to raise awareness about selective collection for employees and outsourced service providers. Currently, we work in partnership with local cooperatives that recycle non-hazardous waste, such as plastic. In 2022 we sent 55% of non-hazardous waste to recycling.

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Value chain stage	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	Our business is not related to production or plastic use. Therefore, our company does not assess the potential environmental and human health impacts for plastic use.

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	Our business is not related to production or plastic use. Therefore, our company does not assess the potential environmental and human health impacts for plastic use.

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Target type	Target metric	Please explain
Row 1	No – but we plan to within the next two years	<Not Applicable>	<Not Applicable>	Our business is not related to production or plastic use. Therefore, our company do not assess the potential environmental and human health impacts for plastic use. AES addresses the issue of plastic consumption internally, along with the waste agenda. The company is currently in the process of resuming projects and campaigns to reduce plastic consumption and intends to set a goal in the near future.

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	No	Not Applicable.
Production of durable plastic components	No	Not Applicable.
Production / commercialization of durable plastic goods (including mixed materials)	No	Not Applicable.
Production / commercialization of plastic packaging	No	Not Applicable.
Production of goods packaged in plastics	No	Not Applicable.
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	Not Applicable.

W11. Sign off

W-FI

(W-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.

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	CEO	Chief Executive Officer (CEO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Please confirm below

I have read and accept the applicable Terms