JBS S.A - Water Security 2022

W0. Introdução

W0.1

(W0.1) Faça uma descrição geral e uma introdução da organização.

JBS is the largest animal protein company and second largest food company in the world (the largest food company in the world in terms of revenue). Because of its global production platform diversified by geographic location and protein types, the Company has greater access to raw materials. Working to process animal protein and value-added products in the beef, pork, lamb and poultry segments, the Company also operates related businesses, such as leather, biodiesel, personal care and cleaning, solid waste management solutions, and metal packaging.

With locations in more than 20 countries and over 500 production units and commercial offices on five continents (the Americas, Asia, Europe, Africa and Oceania), JBS serves around 275,000 customers, in over 190 countries, ranging from supermarket chains to small retailers, wholesale clubs and food service companies.

With around 250,000 team members, the same sustainability (economic, social and environmental), innovation, quality and food safety guidelines are followed in every region, adopting best practices based on the Company's mission and values and a focus on operational excellence, as well as the establishment of better relationships with partners, customers, employees and society, the satisfaction of its shareholders and the commitment to social and environmental responsibility issues. For example: in March 2021, JBS announced a commitment to achieve net zero greenhouse gas emissions by 2040, reducing its direct and indirect emissions (scopes 1, 2 and 3) and offsetting all residual emissions. In addition, we issued US$3 billion in Sustainability Linked Bonds (SLB) at JBS S.A. and PPC, linked to KPIs of 30% reduction in greenhouse gas emissions from scopes 1 and 2 by 2030, in addition to R$ 1 billion in bonds linked to sustainability in Brazil.

The Net Zero 2040 commitment was formally accepted by the Science-Based Targets initiative (SBTi), which establishes and promotes best practices in defining science-based targets. JBS will provide a detailed roadmap through 2023 that enables targets consistent with the criteria established by the SBTi to limit global temperature rise to 1.5°C compared to pre-industrial levels. Internally, the Company structured a working group (WG) with the participation of focal points from all businesses (Brazil, USA, Canada, Mexico, Europe, Australia/New Zealand) to identify solutions that reduce greenhouse gas emissions and can generate value. The group holds periodic meetings to exchange experiences and search for common projects. In Brazil, six other WGs were also created to identify and analyze proposals for Brazilian operations. They are: WG Agro, WG Origination, WG Engineering & Energy, WG Environment, WG R&D, Innovation and Circular Economy, and WG Logistics. The coordination and consolidation of all these initiatives is the responsibility of a new function created within the Company, that of PMO Global, reporting directly to the Global CEO of JBS.

To work on the construction of this roadmap, JBS has the support of two nationally and internationally recognized consultancies for their work on sustainability, who are collaborating with the Company's internal areas to identify project opportunities, define clear KPIs and build science-based goals and action plans.

It is also worth noting that in April 2021, JBS started the operations of the Plataforma Pecuária Transparente ("Transparent Livestock Platform"), which, through blockchain technology, extends socio-environmental monitoring to the suppliers of its livestock suppliers. By the end of 2025, 100% of JBS' cattle suppliers will be part of the program. JBS is advancing in the assistance and inclusion of producers who seek to adapt the socio-environmental situation of their properties. The company already has 15 green offices offering environmental, legal and technical advice.

JBS has a widely diversified product portfolio, from fresh and frozen meats to ready to-eat (prepared) dishes, with leading brands that are recognized for excellence and innovation in-market, such as: Friboi, Just Bare, Pilgrim's, Primo, Seara and Swift. JBS also launched an entire line of plant-based products in Brazil called Incrível! and the Ozo brand in US. In Australia, under PRIMO brand, launched a flexitarian sausage.

JBS has the following structure: 1. JBS Brasil, which includes Friboi, Swift, JBS Couros and Novos Negócios; 2. Seara; 3. JBS USA Beef (JBS USA Beef, JBS Canada, JBS USA Retail Ready, JBS USA Carriers and JBS Australia); 4. JBS USA Pork (JBS USA Pork, JBS USA Live Pork, Swift Prepared Foods and JBS USA Retail Ready); 5. PPC (Pilgrim's); and 6. Rigamonti.

In 2021, JBS's net revenue was R$ 350,7 billion.

More information can be found in the official JBS website (https://jbs.com.br/en/) and in the JBS 2021 Annual and Sustainability Report (https://jbs.com.br/sustentabilidade/ras/relatorios/.)

W-FB0.1a

(W-FB0.1a) Com quais atividades do setor de alimentos, bebidas e tabaco a organização está envolvida?

Processamento/Fabricação

W0.2

(W0.2) Indique a data de início e de fim do ano cujos dados estão sendo divulgados.

	Data de início	Data de fim
Ano de reporte	janeiro 1 2021	dezembro 31 2021

W0.3

(W0.3) Selecione os países/áreas em que a organização opera.

Argentina
Austrália
Brasil
Canadá
França
Alemanha
Itália
México
Holanda
Nova Zelândia
Porto Rico
Reino Unido da Grã-Bretanha e Irlanda do Norte
Estados Unidos da América
Uruguai
Vietnã

W0.4

(W0.4) Selecione a moeda usada para todas as informações financeiras divulgadas ao longo da resposta.

BRL

W0.5

(W0.5) Selecione a opção que melhor descreve os limites de reporte para as empresas, as entidades ou os grupos cujos impactos hídricos estão sendo divulgados.

Empresas, entidades ou grupos sobre os quais se exerce controle operacional

W0.6

(W0.6) Além destes limites, há regiões, instalações, aspectos hídricos ou outros elementos que estão excluídos do reporte?

Sim

W0.6a

(W0.6a) Informe as exclusões.

Exclusão	Explique
Facilities may be excluded due to recent mergers, acquisitions and divestitures, outsourcing and in-sourcing of activities (smaller facilities for which it is not currently possible to track water use may also be considered for exclusion);	During the reporting year there were 7 acquisitions: Vivera, Kerry's retail business, Rivalea, Huon, King's Group, SunnyValley and BioTechFoods. JBS is working to integrate the water data regarding those operations to the monitoring system during 2022.

W0.7

(W0.7) A organização tem um código ISIN ou outro identificador único (por ex., Ticker, CUSIP etc.)?

Indique se é possível apresentar um identificador único para a organização.	Forneça o identificador único
Sim, um código ISIN	BRJBSSACNOR8
Sim, um código ISIN	US4661101034
Sim, um número CUSIP	466110103
Sim, um símbolo no Ticker	JBSS3
Sim, um símbolo no Ticker	JBSAY
Sim, um código SEDOL	B3K5JC0 US

W1. Estado atual

W1.1

(W1.1) Avalie a importância (atual e futura) da qualidade e da quantidade da água para o sucesso dos negócios.

	Classificação da importância do uso direto	Classificação da importância do uso indireto	Explique
Quantidade suficiente de água doce de boa qualidade disponível para uso	Essencial	Essencial	As a food company, water is part of the production process and should be available in high quality standards to be in accordance with the local regulation from where JBS operates. Considering the value chain, water availability (quantity) is one of the main drivers to livestock, pork and poultry maintenance, pasture growth and crops production. Also, JBS business in Brazil (one of the most significant location regarding both production and market) depends on the electricity that is mainly produced by hydroelectric sources. Water was defined as a priority on the Materiality Matrix assessment that took place on 2020. Also on 2020, JBS conducted a climate scenario study and water risk assessment. The scenarios indicate a high impact on the medium and long regarding water scarcity on watersheds where both production and pork and poultry raising are located. The study presents the main elements to support the decision-making process for reducing both climate and water risk. JBS is engaged to reduce the water use in the production; to increase the wastewater standards and to engage the value-chain on water matters. Nevertheless, the business continuity depends direct and indirectly on water. Therefore, in the current scenario and in the future scenario, both aspects of water, quality and quantity, are vital to JBS business continuity considering its importance on operations: in the industrial process and value chain.
Quantidade suficiente de água reciclada, salobra e/ou produzida disponível para uso	Importante	Importante	The food industry has sanitation standard operating procedures that limit water reuse. Nevertheless, this practice is important to the company currently and in the future since it helps manage a vital resource to both production and the value chain. The future scenarios indicate water stress and scarcity in some watersheds where the company's facilities operate and so the company is engaged in actions that implicate on the reduction of freshwater demand as recycled water use. The reuse of water in JBS can occur during the production process, such as the cooling of sausage's production, which currently uses tanks that allow the reuse of water in the process. The reuse also takes place out of the industrial process since the treated wastewater is used to clean patios and external areas. Regarding the value chain, it is known that water availability depends on the management of the river basin and that comprises all users of this resource, including JBS suppliers. The pork production on the value chain (indirect operations) generates a considerable amount of wastewater. The company is engaged to encourage the reuse of treated wastewater, the alternative for treated wastewater is fertigation for agricultural crops. The wastewater has nutrients that serve as fertilizer for soil and is destined for fertigation of pastures, and other crops, rather than being discarded. JBS is engaged to reduce the water use in the production as there is a major effort by the Company to reuse water at JBS facilities. As a result of these work, over 1.7 million m³ of water were reused in JBS Brazil in 2021, accounting for approximately 1% of water withdraw. This allows the company to promote lower water abstraction, reducing the environmental impacts inherent to the industrial process. In the current scenario and in the future scenario, JBS and value chain depend on recycled water since its use allows reducing freshwater dependence.

W-FB1.1a

(W-FB1.1a) Quais commodities agrícolas de alta intensidade de água produzidas e/ou obtidas pela organização são as mais importantes para os negócios, em termos de receitas? Selecione no máximo cinco.

Commodities agrícolas	Porcentagem da receita dependente dessas commodities agrícolas	Produzidas e/ou obtidas	Explique
Produtos da pecuária	41-60	Produzida	The Company has 53 processing units, 15 livestock feedlots and 19 logistics terminal. Concerning leather, JBS Couros has 20 processing units and 6 distribution center, making livestock products a significant part of JBS 'revenue and responsible for a large part of our total water demand. The management of water resources is at the base of the JBS production chain and its sustainable use is a priority. The resource is considered essential to guarantee the sanitary standards of processes and products, such as cleaning areas, equipment and utensils in the operation.
Outro, especifique (Pork products)	Menos de 10%	Produzida	The Company has 14 pork processing units and 2 distribution centers. JBS is the second largest producer and exporter of poultry and pork products, which is why they are so important to our revenue. Water resources management is a fundamental element for the food sector, and it is the base of its productive chain and essential for pork breeding. The resource is considered essential to guarantee the sanitary standards of processes and products, such as cleaning areas, equipment and utensils in the operation.
Outro, especifique (Poultry products)	21-40	Produzida	The Company has 66 poultry processing units and 42 distribution centers. 11 prepared foods units. JBS is the second largest producer and exporter of poultry and pork products, which is why they are so important to our revenue. Water resources management is a fundamental element for the food sector, and it is the base of its productive chain and essential for poultry breeding. The resource is considered essential to guarantee the sanitary standards of processes and products, such as cleaning areas, equipment and utensils in the operation.

W1.2

(W1.2) Em todas as operações da organização, que proporção dos seguintes aspectos hídricos é regularmente medida e monitorada?

	Porcentagem de unidades/instalações/operações	Explique
Captação de água - volume total	100%	All JBS facilities monitor the volume of water withdrawals in a continuous and individualized way. The monitoring is carried out at the withdrawals points, which have measuring equipment (hydrometers), the data of each unit are reviewed and reported to the corporate team daily to verify compliance with established targets, as to seek projects to reduce water consumption which enable the decision-making process to increase the efficiency of JBS. The volume data are also reported by facilities monthly in a corporate software. In Brazil, water withdrawals are regulated by Federal or State Legislation, so all sources from JBS have authorizations that determine the period, volume and source of water to be captured. In 2021, water withdrawals data in Brazil (43.6% from the total water withdrawals) were audited by SGS according to standards established by GRI. Facilities refers to all operational units (poultry and pork farms, slaughter units, distribution centers, animal feed factories).
Captação de água – volume por fonte	100%	JBS facilities monitor through hydrometers the water volume per source at the withdrawal's points: fresh surface water, groundwater, third party sources. Data of each unit are reviewed and reported to the corporate team daily. Data are consolidated and reported monthly within the system Credit360, which allows management and performance evaluation of global sustainability indicators. The data are also annually reported in the sustainability report. This aspect is strategic to JBS, since each source has a peculiarity of availability, quality and cost. Monitoring withdrawals by source enables to identify critical points and to assess the possibility of source alteration. In Brazil, water withdrawals are regulated by Federal or State Legislation. All sources from JBS have authorizations that define the period, volume and source of water to be captured. In 2021 water withdrawals data in Brazil (43.6% from the total) by source were audited by SGS according to standards established by GRI.
Água existente associada às atividades no setor de metais e mineração - volume total [somente para o setor de metais e mineração]	<Not Applicable>	<Not Applicable>

	Porcentagem de unidades/instalações/operações	Explique
Água produzida associada às atividades no setor de petróleo e gás – volume total [somente para o setor de petróleo e gás]	<Not Applicable>	<Not Applicable>
Qualidade da captação de água	100%	The water withdrawals quality in food industries is essential and regulated by a series of health standards in order to ensure, in a comprehensive way, the sanitary standards of industrial processes and all food safety to consumers. Therefore, in all JBS facilities are conducted inspections and routine laboratory tests (hourly and daily) of the water used, monitoring water quality, storage facilities and water treatment, since is vital to the company to keep the quality water standards, assuring the safety of the society, employees and customers. The parameters monitored are also reported in a computerized corporate software (Credit360), which allows management and performance evaluation of the company's global sustainability indicators. The Ministry of Health of the Brazilian government defines the parameters and periodicity of the monitoring of water quality.
Descargas de água – volume total	100%	JBS facilities monitor the volume of water discharge (treated industrial wastewater) by each kind of discharge continuously and individually. Monitoring is accomplished by measuring equipment (hydrometers and Parshall flume), data of each unit by discharge kind are reviewed and reported daily. By constantly monitoring water discharge the company follows up the wastewater treatment status and proposes actions that aim rising its efficiency. Data from each destination are also reported by facilities in a system (Credit360), which allows management and performance evaluation of the company's global sustainability indicators. In Brazil, the water discharge is regulated by Federal or State Legislation, so all water sources discharge from JBS have authorizations that determine the period, volume and the water discharge destination. In 2021, water discharges data in Brazil (43.20%) were audited by SGS according to standards established by GRI.
Descargas de água – volume por destino	100%	JBS facilities monitor the volume of water discharge (treated industrial wastewater) by destination water body, ferti-irrigation, infiltration and public wastewater system, continuously and individually. Monitoring is accomplished by measuring equipment (hydrometers Parshall flume), the data of each unit are reviewed and reported to corporate staff daily. Data from each destination kind are also reported by facilities in a corporate system (Credit360), which allows management and performance evaluation of the company's global sustainability indicators. In Brazil, the water discharge is regulated by Federal or State Legislation, so all water sources discharge from JBS have authorizations that determine the period, volume and the water discharge destination. In addition, total discharged water regarding the kind of destination is also used for GHG calculation. In 2021, water discharges data in Brazil (43.20%) by destination were audited by SGS according to standards established by GRI.
Descargas de água – volume por método de tratamento	100%	Plants have modern treatment stations to collect and appropriately treat the effluent liquid produced by its production processes, complying with legal regulations. All the wastewater from operations is transported to the Company's own treatment stations or public treatment systems. JBS is constantly monitoring wastewater treatment station performance and local government agencies constantly monitor compliance with legally required. All facilities monitor the volume of water discharge (treated industrial wastewater) continuously and individually. Monitoring is accomplished by measuring equipment (hydrometers), the data of each unit are reviewed and reported to corporate staff daily. The data are also reported by facilities in a corporate system (Credit360), which allows management and performance evaluation of the company's global sustainability indicators. In 2021, water discharges data in Brazil (43.20%) by treatment method were audited by SGS.
Qualidade da descarga de água – por parâmetro de efluente padrão	100%	To maintain the treatment efficiency and meet the environmental standards, JBS has specific operational procedures and controls for wastewater treatment. The parameters from untreated effluent and treated effluent are monitored by laboratory analysis. In Brazil, the water discharge is regulated by Federal or State Legislation, so all sources of water discharge have authorizations that determine the period, volume and source of discharge. Physical, chemical and biological parameters are constantly analyzed to ensure required quality of the treated effluent that will be destined accordantly. JBS core business is food production mainly from animal protein, the wastewater treatment addresses organic matter concentration as main pollutant. All units monitor many effluent parameters, such as COD, BOD and NH3, on a weekly/monthly basis (according local legislation). Data are also reported by facilities in a system (Credit360) which allows performance evaluation of sustainability indicators.
Qualidade da descarga de água – temperatura	100%	To maintain the treatment efficiency and meet the environmental standards, JBS has specific operational procedures and internal controls for wastewater treatment. Measurement is performed in accordance with legal requirements of each location where the company operates. The water temperature is measured with mercury thermometer. JBS wastewater is discharged approximately at ambient temperature in specify lagoons wastewater treatment. This process also enables the adaptation of the temperature to the environment. The wastewater temperature must be close to the destination temperature – water bodies or public system. All facilities monitor water temperature in a continuous manner and these data are reviewed and reported to the corporate team daily. The data are also reported by facilities in a corporate system (Credit360), which allows management and performance evaluation of the company's global sustainability indicators.
Consumo de água – volume total	100%	All units monitor the water consumption volume through hydrometer in a continuous and individualized way. The monitoring data of each unit are reviewed and reported to the corporate team daily that checks if the established goals have been met. The consumed water volume is also reported by facilities in a business system (Credit360), which enables the management and evaluation of performance of the global indicators of the company's sustainability.
Água reciclada/reutilizada	100%	Essentially, all units' reuse water in the industrial process. The food industry has sanitation standard operating procedures that limit water reuse. Nevertheless, this practice is important to the company since it helps manage a vital resource to both production and the value chain. The reuse of water in JBS can occur during the production process and place out of the industrial process, since the treated wastewater is used to clean patios and external areas. All units monitor the water reused volume through hydrometers directly at the collection points of destined to the treatment for later reuse. The data of each unit are reviewed and reported to the corporate team daily. The data are also reported by facilities in a corporate system (Credit360), which enables the management and performance evaluation of Company's Global Sustainability Indicators. In 2021, water recycled/reused data in Brazil (93.04%) were audited by SGS according to standards established by GRI.
Fornecimento de serviços de abastecimento de água, saneamento e higiene em perfeito funcionamento e gerenciados de modo seguro para todos os funcionários	100%	In all JBS units there is a water quality control for the production process and for potable water, since is vital to the company to keep the quality standards for water, assuring the safety of the employees. The water used for personal hygiene is provided in accordance with the quality standards defined by ANVISA. A systematic assessment is carried out to check the quality of potable water provided for human consumption. The monitoring is accomplished through daily measurement.

W1.2b

(W1.2b) Quais são os volumes totais de captação, descarga e consumo de água em todas as operações da organização, e como esses volumes se comparam ao ano de reporte anterior?

	Volume (megalitros/ano)	Comparação com o ano de reporte anterior	Explique
Total de captação	177251.7	Igual	JBS uses a sustainability Credit360 software manage its sustainability indicators, monitoring monthly water withdrawals in all its units. In 2021, the company's global data was included and reported, covering JBS Global total water volume. JBS obtained an increase in its water indicator (volume of water) by 3.5%. The main reason is the group's growth due production's increase and companies' acquisition. The future variations in water withdrawals are likely to be small, because although there may be an increase in production, the company has been constantly working to reduce its water consumption per ton of product.
Total de descarga	149946.26	Igual	JBS uses a sustainability Credit360 software manage its sustainability indicators, monitoring monthly water withdrawals in all its units. In 2021, the company's global data was included and reported, covering JBS Global total water volume. JBS obtained an increase in its water indicator (volume of water) by 3.6%. The main reason is the group's growth due production's increase and companies' acquisitions. The future variations in water discharges are likely to be small, because although there may be an increase in production, the company has been constantly working to reduce its water consumption per ton of product.
Consumo total	27305.46	Igual	JBS uses a sustainability Credit360 software manage its sustainability indicators, monitoring monthly water withdrawals in all its units. In 2021, the company's global data was included and reported, covering JBS Global total water volume. JBS obtained an increase in its water indicator (volume of water) by 3.4%. The main reason is the group's growth due production's increase and companies' acquisition. The future variations in water consumption are likely to be small, because although there may be an increase in production, the company has been constantly working to reduce its water consumption per ton of product.

W1.2d

(W1.2d) Indique se a água é captada em áreas com estresse hídrico e declare em que proporção.

	As captações provêm de áreas de estresse hídrico	% captada em áreas de estresse hídrico	Comparação com o ano de reporte anterior	Ferramenta de identificação	Explique
Linha 1	Sim	26-50	Mais baixo	WRI Aqueduct	The greatest reference in the Company for management of areas with water stress is the Sustainable Water Management Program (PGSA). In order to increase efficiency and avoid shortages, the PSGA attempts to identify critical areas and prioritize facilities and watersheds to mitigate the risk of shortfalls and increase usage efficiency, in addition to measuring water-related financial impacts and providing strategic tools and methodologies to support investment decisions. The PGSA development is guided by a specific study which was conducted by an environmental consultancy based on the best practice for water management: Global Water Footprint Assessment Standard, AWS International Water Stewardship Standard and ISO 14.040:2014 (Environmental management – Water footprint). The PGSA has been implemented for over 110 JBS processing facilities in the north and south of Brazil, including almost every major watershed in the country. It is a component in the water management procedures at the company's various businesses, including food (beef, pork, poultry and processed products), leather processing, hygiene and cleaning, biofuel, collagen and other product manufacturing processes. The program guidance defined the beast approach to define units located in areas under water stress would be the combination between: - the output from the WRI Aqueduct: which has indicated the facilities with facilities under high and extremely high water stress; - the water stress risk output from the climate scenarios and evaluation of environmental risks assessment, that defined the watershed under risk; - and monitoring the risk status thought the Watershed Committees. The assessment allows to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk.

W-FB1.2e

(W-FB1.2e) Para cada commodity declarada na pergunta W-FB1.1a, qual é a proporção produzida/extraída em áreas de estresse hídrico?

Commodities agrícolas	A proporção desta commodity produzida em áreas com estresse hídrico é conhecida	A proporção desta commodity obtida em áreas com estresse hídrico é conhecida	Explique
Produtos da pecuária	Sim	Não se aplica	Water resources management is not only a fundamental element for the sustainability of the food sector and the JBS, it is at the base of its productive chain and essential for cattle breeding. In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, it established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by environmental managers, responsible for their respective operational facility to deal specifically with water issues, enhancing water management. The program identified the critical facilities by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each facility, making it possible to prioritize actions such as investment allocation and targets setting to reduce the facilities exposure to shortage risk. This method was selected due to its capacity to integrate external and internal issues, such as water stressed basin and the water shortage exposure of the facility. By Credit360 system, JBS can quantify the percentage of the production that comes from these water stress areas identified and monitor if there is any unit that is facing challenges with water availability and set actions plans if necessary.
Outras commodities em W-FB1.1a, especifique (Pork Products)	Sim	Não se aplica	Water resources management is not only a fundamental element for the sustainability of the food sector and the JBS, it is at the base of its productive chain and essential for pork breeding. In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, it established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by environmental managers, responsible for their respective operational facility to deal specifically with water issues, enhancing water management. The program identified the critical facilities by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each facility, making it possible to prioritize actions such as investment allocation and targets setting to reduce the facilities exposure to shortage risk. This method was selected due to its capacity to integrate external and internal issues, such as water stressed basin and the water shortage exposure of the facility. By Credit360 system, JBS can quantify the percentage of the production that comes from these water stress areas identified and monitor if there is any unit that is facing challenges with water availability and set actions plans if necessary.
Outras commodities em W-FB1.1a, especifique (Poultry products)	Sim	Não se aplica	Water resources management is not only a fundamental element for the sustainability of the food sector and the JBS, it is at the base of its productive chain and essential for poultry breeding. In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, it established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by environmental managers, responsible for their respective operational facility to deal specifically with water issues, enhancing water management. The program identified the critical facilities by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each facility, making it possible to prioritize actions such as investment allocation and targets setting to reduce the facilities exposure to shortage risk. This method was selected due to its capacity to integrate external and internal issues, such as water stressed basin and the water shortage exposure of the facility. By Credit360 system, JBS can quantify the percentage of the production that comes from these water stress areas identified and monitor if there is any unit that is facing challenges with water availability and set actions plans if necessary.

W-FB1.2f

(W-FB1.2f) Que proporção das commodities agrícolas produzidas reportadas em W-FB1.1a tem origem em áreas de estresse hídrico?

Commodities agrícolas	Porcentagem do total de commodities agrícolas produzidas em áreas de estresse hídrico	Explique
Produtos da pecuária	51-75	The percentage refers to the cattle products produced in tons (slaughtering and processing of beef, processing and tanning of bovine leather) in water stress areas over the total amount of commodities produced in tons (cattle, poultry and pork products). In Brazil, the percentage is in the same range as the previous year, because JBS identified the same risk units this year, which were calculated based on an internal methodology at JBS (PGSA) and WRI Aqueduct Water Risk Atlas data base. This methodology was developed due to the increased concern for water scarcity and its relevance in constraining JBS's growth. This metrics is important to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, working to mitigate the risk of shortages and increase efficiency in use. In the coming years, JBS will update its materiality matrix and move forward with its Global Sustainability Strategy in order to achieve its water reduction goals. Regarding water management, JBS will update its water risk analysis and conduct an analysis of the climate scenario study that analyzes the impacts on water availability. In 2020, JBS conducted a climate scenario study and water risk assessment. The potential impact of changes in a future period on the production of operational units was evaluated, as well as the indirect impacts on the supply chain. The study presents the main elements to support the decision-making process for reducing both climate and water risk. The construction of scenarios aims to broaden the perception about the relationship of its operations with the effects of climate change. The climate scenario study and water risk assessment output regarding future trends added to the status of the watersheds monitored on the Watershed Committees leads to the scenario where critical watersheds will remain critical on the following years. The climate change combined to the lack of effective watershed management unfortunately do not allow the identification from any of the watersheds from cattle, pork or poultry products lowering its water stress risk. In 2021, the monitoring process used local government databases and climate data to formulate a strategic planning of purchase. In 2021, 69% of tons of cattle products were produced in areas with High and Extremely high water stress.
Outras commodities produzidas de W-FB1.2e, especifique (Pork products)	26-50	The percentage refers to the pork products produced in tons (fresh and processed) in water stress areas over the total amount of commodities produced in tons (cattle, poultry and pork products). In Brazil, the percentage is in the same range as the previous year, because JBS identified the same risk units this year, which were calculated based on an internal methodology at JBS (PGSA) and WRI Aqueduct Water Risk Atlas data base. This methodology was developed due to the increased concern for water scarcity and its relevance in constraining JBS's growth. This metrics is important to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, working to mitigate the risk of shortages and increase efficiency in use. In the coming years, JBS will update its materiality matrix and move forward with its Global Sustainability Strategy in order to achieve its water reduction goals. In the same effort, with regard to water management, JBS will update its water risk analysis and conduct an analysis of the climate scenario study that analyzes the impacts on water availability. In 2020, JBS conducted a climate scenario study and water risk assessment. The potential impact of changes in a future period on the production of operational units was evaluated, as well as the indirect impacts on the supply chain. The study presents the main elements to support the decision-making process for reducing both climate and water risk. The construction of scenarios aims to broaden the perception about the relationship of its operations with the effects of climate change. The climate scenario study and water risk assessment output regarding future trends added to the status of the watersheds monitored on the Watershed Committees leads to the scenario where critical watersheds will remain critical on the following years. The climate change combined to the lack of effective watershed management unfortunately do not allow the identification from any of the watersheds from cattle, pork or poultry products lowering its water stress risk. In 2021, the monitoring process uses local government databases and climate data to formulate a strategic planning of purchase. In 2021, 32% of tons of pork products were produced in areas with High and Extremely high water stress.
Outras commodities produzidas de W-FB1.2e, especifique (Poultry products)	11-25	The percentage refers to the poultry products produced in tons (fresh and processed) in water stress areas over the total amount of commodities produced in tons (cattle, poultry and pork products). In Brazil, the percentage is in the same range as the previous year, because JBS identified the same risk units this year, which were calculated based on an internal methodology at JBS (PGSA) and WRI Aqueduct Water Risk Atlas data base. This methodology was developed due to the increased concern for water scarcity and its relevance in constraining JBS's growth. This metrics is important to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, working to mitigate the risk of shortages and increase efficiency in use. In the coming years, JBS will update its materiality matrix and move forward with its Global Sustainability Strategy in order to achieve its water reduction goals. In the same effort, regarding water management, JBS will update its water risk analysis and conduct an analysis of the climate scenario study that analyzes the impacts on water availability. In 2020, JBS conducted a climate scenario study and water risk assessment. The potential impact of changes in a future period on the production of operational units was evaluated, as well as the indirect impacts on the supply chain. The study presents the main elements to support the decision-making process for reducing both climate and water risk. The construction of scenarios aims to broaden the perception about the relationship of its operations with the effects of climate change. The climate scenario study and water risk assessment output regarding future trends added to the status of the watersheds monitored on the Watershed Committees leads to the scenario where critical watersheds will remain critical on the following years. The climate change combined to the lack of effective watershed management unfortunately do not allow the identification from any of the watersheds from cattle, pork or poultry products lowering its water stress risk. In 2021, the monitoring process uses local government databases and climate data to formulate a strategic planning of purchase. In 2021, 17% of tons of poultry products were produced in areas with High and Extremely high water stress.

W1.2h

(W1.2h) Apresente dados sobre o total de captação de água por fonte.

	Relevância	Volume (megalitros/ano)	Comparação com o ano de reporte anterior	Explique
Água doce de superfície, incluindo águas de chuva, brejos, rios e lagos	Relevante	43709.3	Igual	In 2021, the company's global data was included and reported, covering JBS Global total water volume. Of this total volume, 93% refers to Brazil's surface water consumption. The surface water is relevant because represents 25% of the total water withdrawal. The volume comprises surface sources (rivers, lakes) and rainwater, which are monitored daily. All Facilities monitor water withdrawals by source since it enables the company to identify critical points and to assess the possibility of water source alteration. Comparison with the previous reporting year, the volume decreased just 2.4% compared to last year, due the fact that water was withdrawn from other sources in 2021.
Água salobra de superfície/água do mar	Não relevante	<Not Applicable>	<Not Applicable>	JBS does not withdraw water from Brackish surface or from the sea.
Água subterrânea – renovável	Relevante	59451.1	Mais alto	In 2021, the company's global data was included and reported, covering JBS Global total water volume. Of this total volume, 55% refers to Brazil's groundwater consumption. The groundwater is relevant because represents 34% of the total water withdrawal. The volume comprises Groundwater, which is monitored daily. All Facilities monitor water withdrawals by source since it enables the company to identify critical points and to assess the possibility of water source alteration. The volume is 4.3% higher, compared to last year, due to local decision to attend the demand through groundwater and compensate the usage from fresh surface water. Also, the company invested in eliminating water lose and leakage, and improving on the water capture and monitoring system, which improved the data quality monitored and reported through the monitoring. This might have led to an increase in the monitored data figure.
Água subterrânea – não renovável	Não relevante	<Not Applicable>	<Not Applicable>	JBS does not withdraw water from non-renewable groundwater.
Água produzida/arrastada	Não relevante	<Not Applicable>	<Not Applicable>	This use does not apply to JBS.
Fontes terceirizadas	Relevante	74091.3	Mais alto	In 2021 , the company's global operation data was reported. Just 5% refers to Brazil's third-party sources consumption. However in JBS' overview third-party sources is relevant since represents 42% from total water withdrawal. Third-party sources are the main source on some locations, also used during periods of drought and to attend a facility higher demand of water. All Facilities monitor water withdrawals by source since it enables to assess the possibility of water source alteration. The comparison with the previous reporting year is 6.8% higher due increased production on plants that use third-party sources, such as Montenegro plant (JBS Couros) and Uberaba plant (Seara) and also on drought periods. Also, the company invested in eliminating water lose and leakage, and improving on the water capture and monitoring system, which improved the data quality monitored and reported through the monitoring system in 2021, which might have led to an increase in the monitored data figure.

W1.2i

(W1.2i) Apresente dados sobre o total de descarga de águas por destino.

	Relevância	Volume (megalitros/ano)	Comparação com o ano de reporte anterior	Explique
Água doce de superfície	Relevante	81810	Igual	In 2021, the company's global data was included, covering JBS Global total discharged wastewater volume. Of this total volume, 71% refers to the volume of wastewater discharged in fresh surface in Brazil. The surface disposal is relevant because it represents 55% of the total wastewater discharged, and JBS ensures that this effluent returns to the environment with quality and safe form because all facilities have the control of water discharge due to flow rate measurements and also have a wastewater treatment plant at its own facilities, meeting the legal requirements for wastewater discharge. The discharged volume is calculated at the end of the wastewater treatment. In 2021, the volume was 1.8% higher compared to 2020, this means that the new wastewater added regarding new operations were not discharged on freshwaters. therefore, it was reported as about the same.
Água salobra de superfície/água do mar	Não relevante	<Not Applicable>	<Not Applicable>	JBS does not discharge water in Brackish surface or the sea.
Água subterrânea	Relevante	17873.6	Mais alto	In 2021, the company's global data was included, covering JBS Global total discharged wastewater volume. Of this total volume, 32% refers to the volume of wastewater discharged in this destination in Brazil. Groundwater is relevant because represents over than 10% of the total wastewater discharged. This amount refers to the water infiltration into the soil and the volume used in processing that is treated and reused as fertilizer in pastures, replacing the use of fertilizers. There was an increase of 25.5% of water discharged in groundwater, mainly due the improvement on the monitoring of water infiltration on the soil.
Destinos de terceiros	Relevante	50262.7	Igual	In 2021, the company's global data was included, covering JBS Global total discharged wastewater volume. Of this total volume, just 2% refers to the volume of wastewater discharged in this destination in Brazil. However, in JBS' overview, the water discharge to third parties represents 34% of the total of the discharged sources. All facilities have the control of water discharge due to flow rate measurements. The amount discharged reported in third-party destination comprise the Wastewater sent to the public sewer system. There were no significant changes in the amount of water discharged in the public sewer system compared to last year, only a decrease of 0.3%, this means that the new wastewater added regarding new operations were not discharged on third-party destinations.

W1.2j

(W1.2j) Indique o(s) nível(is) mais alto(s) em que as descargas são tratadas nas suas operações diretas.

	Relevância do nível de tratamento para a descarga	Volume (megalitros/ano)	Comparação do volume tratado com o do ano de reporte anterior	Porcentagem de unidades/instalações/operações a que esse volume se aplica	Explique
Tratamento terciário	Não relevante	<Not Applicable>	<Not Applicable>	<Not Applicable>	JBS doesn't have Tertiary treatment.
Tratamento secundário	Relevante	149946.26	Igual	51-60	In 2021, the company's global data was included and reported, covering JBS Global total discharged wastewater volume. 60.24% discharged from JBS Global facilities undergoes secondary treatment. The main driver to the decision to have a secondary treatment is to be in accordance with the local environmental regulation (Federal, State or Municipality) which guarantees that wastewater will be discharged according to the high standards of the respective countries' environmental legislations. There were no significant changes in the amount of treated volume of water discharged compared to last year, only an increase of 3.4%.
Apenas tratamento primário	Relevante		Selecione	31-40	The main driver to the decision to have a primary treatment is to be in accordance with the local environmental regulation (Federal, State or Municipality) which guarantees that wastewater will be discharged according to the high standards of the respective countries' environmental legislations. This is the first year we report the Global operations data. Considering that just the Brazilian operation was reported until 2020 and that 100% from the discharge in Brazil undergoes to secondary treatment, data from 2020 is not available to compare its behavior against 2021. Each of our production and further processing facilities has a tailored wastewater treatment program that meets its individual discharge permit requirements. Many of our smaller facilities undergo primary treatment before discharging the water to a municipality for further treatment.
Descarga no meio ambiente natural sem tratamento	Não relevante	<Not Applicable>	<Not Applicable>	<Not Applicable>	JBS does not discharge to the natural environment without treatment
Descarga em terceiros sem tratamento	Não relevante	<Not Applicable>	<Not Applicable>	<Not Applicable>	JBS does not discharge to a third party without treatment
Outros	Não relevante	<Not Applicable>	<Not Applicable>	<Not Applicable>	

W1.3

(W1.3) Dê um valor para a eficiência na captação total de água pela organização.

	Receita	Volume total de captação de água (megalitros)	Eficiência total na captação de água	Tendência futura prevista
Linha 1	350695560000	177251.72	1978517.10550397	Considering our effort and aim to reduce the water intensity, the water intensity is expected to increase from 2 to 5% in the next year.

W-FB1.3

(W-FB1.3) É coletada/calculada a intensidade hídrica para cada commodity divulgada na pergunta W-FB1.1a?

Commodities agrícolas	São coletadas/calculadas informações sobre a intensidade hídrica para esta commodity produzida	São coletadas/calculadas informações sobre a intensidade hídrica para esta commodity obtida	Explique
Produtos da pecuária	Sim	Não se aplica	To calculate the water intensity of our products, we use the "total water withdrawn" in all our operations (calculated on internal meters) and our "production" in tons. We control these detailed data by factory, which are reviewed by environmental professionals and reported on the Credit360 system on a monthly basis, thus calculating how much water is being consumed per ton of product. Both data referring to the year 2021 (water withdrawal and production) in Brazil were audited by the audit firm SGS, according to the GRI methodology. This parameter is used to monitor performance and efficiency, as well as to define short- and long-term goals
Outras commodities em W-FB1.1a, especifique (Poultry products)	Sim	Não se aplica	To calculate the water intensity of our products, we use the "total water withdrawn" in all our operations (calculated on internal meters) and our "production" in tons. We control these detailed data by factory, which are reviewed by environmental professionals and reported on the Credit360 system on a monthly basis, thus calculating how much water is being consumed per ton of product. Both data referring to the year 2021 (water withdrawal and production) in Brazil were audited by the audit firm SGS, according to the GRI methodology. This parameter is used to monitor performance and efficiency, as well as to define short- and long-term goals.
Outras commodities em W-FB1.1a, especifique (Pork products)	Sim	Não se aplica	To calculate the water intensity of our products, we use the "total water withdrawn" in all our operations (calculated on internal meters) and our "production" in tons. We control these detailed data by factory, which are reviewed by environmental professionals and reported on the Credit360 system on a monthly basis, thus calculating how much water is being consumed per ton of product. Both data referring to the year 2021 (water withdrawal and production) in Brazil were audited by the audit firm SGS, according to the GRI methodology. This parameter is used to monitor performance and efficiency, as well as to define short- and long-term goals.

W-FB1.3a

(W-FB1.3a) Apresente informações de intensidade hídrica para cada commodity agrícola identificada em W-FB1.3 produzida pela organização.

Commodity agrícola
Produtos da pecuária

Valor da intensidade hídrica (m3)
7.59

Numerador: aspecto hídrico
Captações totais de água

Denominador
Toneladas

Comparação com o ano de reporte anterior
Igual

Explique
In 2021, the company's global data was included and reported, covering all JBS Global data. The water intensity decreased by 0.5% compared to the previous year, so it is classified as "about the same. The company invested in eliminating water lose and leakage, and improving the water capture and monitoring system in 2021, which increased the total figure regarding the amount of water used and made impossible to capture all the benefits from the efficiency projects implemented on the cattle production facilities. All units of the JBS monitor daily the water intensity indicators (m^3/ton of final product). Based on these indicators, it is possible to identify the performance of each unit, identifying best practices and opportunities for improvement in low performance units, and generating historical data for the definition of the next goals. The company is committed to the goal of reducing water intensity in 15% until 2030 for Brazil operations compared to the average base year 2019. JBS constantly encourages its employees to develop and share ideas and projects that bring environmental and economic benefits.

Commodity agrícola
Outras commodities produzidas de W-FB1.3, especifique (Poultry products)

Valor da intensidade hídrica (m3)
10.33

Numerador: aspecto hídrico
Captações totais de água

Denominador
Toneladas

Comparação com o ano de reporte anterior
Igual

Explique
In 2021, the company's global data was included, covering all JBS Global data. The water intensity increased by 2% compared to the previous year, so it is classified as "about the same.". The company invested in eliminating water lose, leakage and improving the water capture and monitoring system in 2021, which increased the total figure regarding the amount of water used on the poultry production. Also, the new companies acquired during 2021 are starting to implement the water efficiency culture and to have its target and goal. All units of the JBS monitor daily the water intensity indicators (m^3/ton of final product). Based on these indicators, it is possible to identify the performance of each unit, identifying best practices and opportunities for improvement in low performance units, and generating historical data for the definition of the next goals. The company is committed to the goal of reducing water intensity in 15% until 2030 for Brazil operations compared to the average base year 2019. JBS constantly encourages its employees to develop and share ideas and projects that bring environmental and economic benefits.

Commodity agrícola
Outras commodities produzidas de W-FB1.3, especifique (Pork products)

Valor da intensidade hídrica (m3)
4.64

Numerador: aspecto hídrico
Captações totais de água

Denominador
Toneladas

Comparação com o ano de reporte anterior
Mais baixo

Explique
In 2021, the company's global data was included, covering all JBS Global data. The water intensity decreased by 5% compared to the previous year, so it is classified as "lower". The company invested in eliminating water lose, leakage and improving the water capture and monitoring system in 2021, which increased the total figure regarding the amount of water used. Even though, it was possible to capture the benefits from the efficiency projects implemented on the pork production facilities. All units of the JBS monitor daily the water intensity indicators (m^3/ton of final product). Based on these indicators, it is possible to identify the performance of each unit, identifying best practices and opportunities for improvement in low performance units, and generating historical data for the definition of the next goals. The company is committed to the goal of reducing water intensity in 15% until 2030 for Brazil operations compared to the average base year 2019. JBS constantly encourages its employees to develop and share ideas and projects that bring environmental and economic benefits.

W1.4

(W1.4) A organização se engaja com a cadeia de valor em relação às questões hídricas?
Sim, com nossos fornecedores

W1.4a

(W1.4a) Qual é a proporção de fornecedores para os quais são solicitados relatórios sobre o uso, os riscos e/ou a gestão da água, e que proporção das despesas com aquisição da organização isso representa?

Linha 1

Porcentagem de fornecedores por número
26-50

Porcentagem das despesas totais com aquisições
26-50

Justificativa para esta abrangência
The majority of JBS's suppliers is in Brazil and USA.
In the pork and poultry supply chain in Brazil, 100% of integrated producers receive visits and technical assistance from the Company helping suppliers to improve water management. During the supply process, checklists are applied addressing water source in the farm, water withdrawn, and hydraulic retention time HRT ensuring wastewater performance. All visits are done by around 500 extension agents who make technical tours to guarantee that all suppliers adopt practices in compliance with environmental laws.
For cattle suppliers in Brazil, JBS made progress in its Supply Chain Protocol, the document that 100% of cattle production facilities follows, certifying compliance with criteria that assure food safety and meet the highest standards. Through this initiative, the Company brings together strict protocols on topics such as animal welfare, traceability, sustainability, operation, production. JBS developed the Grade 10 Farm program, which offers training for high-performance management developed in partnership with Instituto Inttegra. Over 2021, more than 120 JBS suppliers participated addressing environmental issues such as water management.
As part of our efforts to minimize impacts in the supply chain, JBS USA developed a Supplier Code of Conduct ensuring suppliers meet or exceed our high standards when conducting business with JBS. The code covers many topics as human rights, freedom of association and collective bargaining, health and safety and environmental issues.
In the U.S. and Canada, 100% of the company's cattle suppliers are required to sign an affidavit indicating their compliance with governmental regulations, certification of Beef Quality Assurance (BQA).
In the U.S., we encourage our feedyard partners to enter the precompetitive National Cattlemen's Beef Association (NCBA) Feedyard Assessment Database. Enrollment is voluntary and demonstrates commitment to environmental stewardship. Approximately 62% of our feedyard partners participate to date.
In 2019, we became the first U.S. beef company to achieve recognition across our supply chain in the cow-calf, feedyard/finisher and processing segments from the U.S. Beef Industry Sustainability Framework. It outlines key areas of sustainability and improvement across the U.S. beef value chain. comprising high-priority indicators (including environmental topics like land use and water use), sustainability assessment guidelines.

Impacto do engajamento e medições de sucesso
Poultry and Pork: Through 500 field technicians, JBS guide the responsible production management, including water management, meeting the quality standards and in line with the principles of animal welfare. In all the integrated properties we perform the monitoring in the hydrometers during the production of the lots. All information is filled in the batch form and delivered at the end of the batch with consumption information. We engage the whole value chain through the mandatory protocol to fill the water use on the form every time the batch is delivered.
Cattle: Concerning Supply Chain Protocol, all Brazil units operate according to the guidelines of the Protocol and undergo annual external audits, performed by the Brazilian Certification System. In 2021, all Friboi units passed and kept their seals. Regarding the Grade 10 Farm Program, in 2021, more than 120 JBS suppliers participated in the program. For both commodities are requested information from the total volume of water withdrawal and environmental conditions of the withdrawal point. For JBS, the information is very important as it is fully integrated with JBS 'objectives, strategies and business plan, as well as our responsibility to produce sustainable, safe and quality food. To improve its management JBS actively participates in the Sustainable Livestock Indicators Guide (GIPS), aiming to measure and improve meat production in the sustainable practices, covering themes such as efficient water use.

Comentários

W1.4b

(W1.4b) Dê detalhes sobre outras eventuais atividades de engajamento com o fornecedor relacionadas à água.

Tipo de engajamento
Incentivo para a melhoria da gestão e da governança da água

Detalhes do engajamento
A gestão e as ações de governança da água estão integradas à avaliação do fornecedor

Porcentagem de fornecedores por número
1-25

Porcentagem das despesas totais com aquisições
1-25

Justificativa para a abrangência do engajamento
Annually, JBS evaluates 100% of its poultry and pork supply chain through the Sustainability Index, which measures from the most basic to the most advanced practices in environmental, economic and social aspects, such as effluent treatment, water use, compliance with environmental licensing and self-sufficient water farms. Globally, JBS worldwide has 140.000 suppliers, Seara represent almost 0.5% of them (9,000).

Impacto do engajamento e medições de sucesso
The results achieved in 2021 assessment have an average score of 74.8% considering all dimensions assessed, an improvement from last year which score was 71.3%. In 2021, the highlights were again as the last year on the effluent treatment quality; All units make an action plan with countermeasures for the evolution of items not covered, according to the assessment of each member. The goal is to continuously improve this standard over the time.

Comentários
The Integration system with Seara supports and encourages investment in the modernization and adoption of sustainable technologies that offer the activity of cost reduction with increased efficiency and increased productivity, as well as financially encouraging the construction of new projects, with policies of remuneration customized for each animal category.

W2. Impactos nos negócios

W2.1

(W2.1) A organização já sofreu algum impacto negativo relacionado à água?

Sim

W2.1a

(W2.1a) Descreva os impactos negativos relacionados à água sofridos pela organização, a resposta da organização e o impacto financeiro total.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Guaiba basin)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto

Aumento nos custos de produção

Descrição do impacto

With the drought, JBS had to buy water from third parties, and increased its production cost. The impact was substantial because the cost was high in relation to the cost of production.

Principal resposta

Garantir um abastecimento alternativo de água

Impacto financeiro total

4800386

Descrição da resposta

The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted, or the volumes were insufficient for operations. It was necessary to pay for the transport of raw water from a nearby unit to the site. The financial impact refers to this transport.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Guaiba basin)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto

Aumento nos custos operacionais

Descrição do impacto

With the drought, JBS had to buy water from third parties, and increased its production cost. Despite this, the impact was not substantial because the cost was proportionally low in relation to the cost of production, and there was no need to interrupt production

Principal resposta

Garantir um abastecimento alternativo de água

Impacto financeiro total

1423436

Descrição da resposta

The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted or the volumes were insufficient for operations. It was necessary to pay for the transport of raw water from a nearby unit to the site. The financial impact refers to this transport.

País/área e Bacia hidrográfica

Brasil	Uruguai

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto

Aumento nos custos operacionais

Descrição do impacto

With the drought, JBS had to buy water from third parties, and increased its production cost. Despite this, the impact was not substantial because the cost was proportionally low in relation to the cost of production, and there was no need to interrupt production.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
1772562

Descrição da resposta
The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted or the volumes were insufficient for operations. It was necessary to pay for the transport of raw water from a nearby unit to the site. The financial impact refers to this transport.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Guaiba basin)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Aumento nos custos operacionais

Descrição do impacto
With the drought, JBS had to buy water from third parties, and increased its production cost. Despite this, the impact was not substantial because the cost was proportionally low in relation to the cost of production, and there was no need to interrupt production.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
797748

Descrição da resposta
The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted or the volumes were insufficient for operations.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Guaiba basin)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Aumento nos custos operacionais

Descrição do impacto
With the drought, JBS had to buy water from third parties, and increased its production cost. Despite this, the impact was not substantial because the cost was proportionally low in relation to the cost of production, and there was no need to interrupt production.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
744208.01

Descrição da resposta
The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted or the volumes were insufficient for operations.

País/área e Bacia hidrográfica

Brasil	Uruguai

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Aumento nos custos de produção

Descrição do impacto
With the drought, JBS had to buy water from third parties, and increased its production cost. Despite this, the impact was not substantial because the cost was proportionally low in relation to the cost of production, and there was no need to interrupt production.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
523888

Descrição da resposta
The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted or the volumes were insufficient for operations.

País/área e Bacia hidrográfica

Brasil	Uruguai

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Aumento nos custos de produção

Descrição do impacto
With the drought, JBS had to buy water from third parties, and increased its production cost. Despite this, the impact was not substantial because the cost was proportionally low in relation to the cost of production, and there was no need to interrupt production.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
1107786

Descrição da resposta
The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted or the volumes were insufficient for operations. It was necessary to pay for the transport of raw water from a nearby unit to the site. The financial impact refers to this transport.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Tocantins-Araguaia)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Aumento nos custos operacionais

Descrição do impacto
With the drought, JBS had to buy water from third parties, and increased its production cost. Despite this, the impact was not substantial because the cost was proportionally low in relation to the cost of production, and there was no need to interrupt production.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
1225504

Descrição da resposta
The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted or the volumes were insufficient for operations.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Tocantins-Araguaia)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Outro, especifique (Need to find alternative supply)

Descrição do impacto
With the drought, JBS had to find an alternative source of water supply. No cost was associated with this impact therefore the impact classified as low.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
0

Descrição da resposta

With the drought, JBS decide to storage water on dam. No cost was associated with this impact therefore the impact classified as low.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Tocantins-Araguaia)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Inundação (costeira, fluvial, pluvial, de águas subterrâneas)

Principal impacto
Outro, especifique (Implement pump to drain the water)

Descrição do impacto
Implement pump to drain the water. No cost was associated with this impact therefore the impact classified as low.

Principal resposta
Outro, especifique (Relocation of the catchment ferry)

Impacto financeiro total
0

Descrição da resposta
Relocation of the catchment ferry. No cost was associated with this impact therefore the impact classified as low.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Tocantins-Araguaia)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Outro, especifique (Need to find alternative supply)

Descrição do impacto
With the drought, JBS had to find an alternative source of water supply. No cost was associated with this impact therefore the impact classified as low.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
0

Descrição da resposta
With the drought, JBS decide to storage water on dam. No cost was associated with this impact therefore the impact classified as low.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Tocantins-Araguaia)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Outro, especifique (Need to find alternative supply)

Descrição do impacto
With the drought, JBS had to find an alternative source of water supply. No cost was associated with this impact therefore the impact classified as low.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
0

Descrição da resposta
With the drought, JBS decide to storage water on dam. No cost was associated with this impact therefore the impact classified as low.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Tocantins-Araguaia)

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Outro, especifique (Need to find alternative supply)

Descrição do impacto
With the drought, JBS had to find an alternative source of water supply. No cost was associated with this impact therefore the impact classified as low.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
0

Descrição da resposta
With the drought, JBS decide to storage water on dam. No cost was associated with this impact therefore the impact classified as low.

País/área e Bacia hidrográfica

Brasil	Paraná

Tipo de fator de impacto e Principal fator de impacto

Físico agudo	Estiagem

Principal impacto
Outro, especifique (Need to find alternative supply)

Descrição do impacto
There was a decrease in water flows from the wells of the unit. This led to peaks of lack of water and interruption of Triparia production.

Principal resposta
Garantir um abastecimento alternativo de água

Impacto financeiro total
227650

Descrição da resposta
The cost is associated with the need to purchase water from third-party sources, since the sources of water abstraction were interrupted or the volumes were insufficient for operations.

W2.2

(W2.2) No ano de reporte, a organização foi submetida a multas, ordens de execução e/ou outras penalidades pela violação de alguma lei relacionada à água?
Não

W3. Procedimentos

W-FB3.1

(W-FB3.1) Como a organização identifica e classifica possíveis poluentes associados às suas atividades no setor de alimentos, bebidas e tabaco que poderiam ter um impacto negativo para os ecossistemas aquáticos ou a saúde humana?

The JBS business strategy is predicated on quality excellence and food safety. All JBS facilities have modern treatment stations to appropriately treat the effluent liquid produced by its production processes, complying with legal regulations. Due to the nature of JBS's operations, the company is legally obliged to monitor the quality of effluents it releases to the environment. All wastewater from JBS operations is transported to the Company's own treatment stations or to the public treatment systems. The JBS internal requirements for efficiency performance in physical, chemical and biological parameters are higher than those required by applicable legislation - in order to ensure compliance with legal requirements and the protection of water resources. The effluents from all units undergo appropriate treatment before final discharge and their samples are examined in laboratories, and the results are submitted to regulatory bodies and reported in the Credit360 monthly. The local government agencies constantly monitor compliance with legally required physical and chemical standards. The main parameters analyzed that could eventually cause direct or indirect impact are: COD, BOD, pH, Nitrogen, temperature, TSS, among others. The organic matter is the main pollutant regarding the animal raise, mainly pork, and therefore wastewater COD, BOD, nitrite, nitrate, ammoniacal nitrogen and total phosphorus are the parameters that are monitored in order to indicate the treatment efficiency regarding organic matter. Also, Seara (the company that produces pork in Brazil) has a BOD target that is addressed on each unit on order to guarantee that the unit's wastewater will be in compliance with the river classification. To reduce the volume and guarantee the quality of the effluents produced, JBS invests in procedures to reduce the organic load in the effluents through well-dimensioned treatment systems that guarantee high efficiency. JBS also invests in flotation systems and anaerobic lagoons to help reduce emissions from effluents. In 2021, over R$ 120 million was invested in modernizing and improving effluent treatment efficiency. In the value chain, the livestock activities (manure and slurries production in pork suppliers for example) if not managed and treated appropriately can compromise water bodies. To support the management of impacts in the poultry and pork supply chain, JBS conducts technical visits to suppliers to ensure that everyone adopts practices and structures suitable for production and in compliance with the necessary environmental laws, addressing issues such as wastewater management. To improve the management of livestock suppliers, JBS participated in the construction of the Sustainable Livestock Indicators Guide (GIPS), developed by the Brazilian Roundtable on Sustainable Livestock (GTPS).

W-FB3.1a

(W-FB3.1a) Descreva como a organização minimiza os impactos adversos de possíveis poluentes para os ecossistemas aquáticos ou a saúde humana associados às suas atividades no setor de alimentos, bebidas e tabaco.

Potencial poluente da água
Águas residuais e lama com alto conteúdo orgânico ou de sólidos em suspensão

Etapa da cadeia de valor/atividade
Fabricação – operações diretas

Descrição do poluente da água e dos potenciais impactos
The activities in the industrial processes of slaughter and processing of the cattle, pork and poultry products can generate organic matter pollutants, and a high organic load concentration. Without the due treatment can generate alterations in the water quality, causing eutrophication, oxygen reduction and species mortality, being harmful to aquatic ecosystems. If discarded in waters used for human consumption, the consequences can result in diseases such as cholera, dysentery, among others.

Procedimentos de gestão
Gestão das águas residuais
Cumprimento das normas regulamentadoras

Explique
All JBS facilities have modern treatment stations to collect and appropriately treat the effluent liquid produced by its production processes, complying with legal regulations. In 2021, over R$ 120 million was invested in modernizing and improving effluent treatment efficiency. All of the wastewater from JBS operations is transported to the Company's own treatment stations or to the public treatment systems. The Company is constantly monitoring wastewater treatment station performance and local government agencies constantly monitor compliance with legally required physical and chemical standards. The JBS internal requirements for efficiency performance in physical, chemical and biological parameters are higher than those required by applicable legislation - in order to ensure compliance with legal requirements and the protection of water resources. The organic matter is the main pollutant regarding the animal raise, mainly pork, and therefore wastewater COD, BOD, nitrite, nitrate, ammoniacal nitrogen and total phosphorus are the parameters that are monitored in order to indicate the treatment efficiency regarding organic matter. Also, Seara (the company that produces pork in Brazil) has a BOD target that is addressed on each unit on order to guarantee that the unit's wastewater will be in compliance with the river classification. The effluents from all units undergo appropriate treatment before final discharge and their samples are examined in laboratories, and the results are submitted to regulatory bodies and reported in the Credit360 monthly.

Potencial poluente da água
Esterco e chorume

Etapa da cadeia de valor/atividade
Agricultura – cadeia de fornecimento

Descrição do poluente da água e dos potenciais impactos
The activities of livestock on farms can generate organic matter pollutants and a high organic load concentration. Without the due treatment can generate alterations in the water quality causing eutrophication, oxygen reduction and species mortality, being harmful to aquatic ecosystems. If discarded in waters used for human consumption, the consequences can result in diseases.

Procedimentos de gestão
Gestão das águas residuais
Cumprimento das normas regulamentadoras

Explique
All JBS pork supplier is obligated to install in their farms a wastewater treatment system in order to treat the manure generated in that operation. JBS monitor hydraulic retention time HRT that must be at least 120 days in order to guarantee performance. In the poultry farms, it is not necessary to install any kind of treatment since the manure produced is manage in order to contribute with the quality of the farm floor and not represent pollution risk to the environmental. For cattle suppliers, since more than 75% of the livestock acquired are breed throughout their lives in pasture, their manure is absorbed by the pasture in the nature environment. To improve cattle suppliers' management JBS participated in the construction of the Sustainable Livestock Indicators Guide (GIPS), developed by the Brazilian Roundtable on Sustainable Livestock (GTPS). This group is developing a guidance for Sustainable Livestock indicators, aiming to account the sustainability in meat production. The tool contains themes such as Business Management, Communities, Workers, Environment and Value Chain. In Criterion 4.2 of GIPS, it is approached the efficient use of water resources, water consumption, reuse, treatment and / or proper disposal and compliance with legal requirements.

W3.3

(W3.3) A organização realiza alguma avaliação de riscos hídricos?
Sim, os riscos hídricos são avaliados

W3.3a

(W3.3a) Selecione as opções que melhor descrevem os procedimentos da organização para identificar e avaliar os riscos hídricos.

Estágio da cadeia de valor
Operações diretas

Abrangência
Total

Procedimento de avaliação de riscos
Os riscos hídricos são avaliados como parte de uma estrutura estabelecida de gestão de riscos corporativos

Frequência da avaliação
Mais de uma vez por ano

Até que momento no futuro os riscos são levados em consideração?

De 3 a 6 anos

Tipo de ferramentas e métodos usados
Ferramentas existentes no mercado
Gestão de riscos corporativos
Bancos de dados

Ferramentas e métodos usados
WRI Aqueduct
Bancos de dados do governo regional
Outro, especifique (Credit 360)

Questões contextuais levadas em consideração
Disponibilidade de água no nível da bacia/captação
Qualidade da água no nível da bacia/captação
Conflitos entre as partes interessadas a respeito dos recursos hídricos no nível da bacia ou do represamento
Implicações da água para as principais commodities/matérias-primas
Marcos regulatórios referentes à água

Partes interessadas levadas em consideração
Funcionários
Investidores
Comunidades locais
Órgãos reguladores
Fornecedores
Empresas de abastecimento de água locais
Outros usuários da água no nível da bacia/captação

Comentários
In Brazil, the PGSA monitor critical units using data monitored regarding the impacts of water shortage; the importance of water to these units' strategy and identifying critical river basins using databases provided by Brazilian National Water Agency (ANA) added by the inputs captured on the Watershed Committees watershed scarcity risks. The Watershed Committees are also the forum to hear from local communities about the water related issues. In additional, JBS also monitors the risks with the help of Aqueduct provided by WRI and Credit360 to manage its sustainability KPIs indicators, monitoring monthly water withdrawals. Also, the climate change risk assessment study from 2020 identified the watersheds that are more vunerable to water events in the long term.
Considering the other locations around the world, water stewardship is crucial to our long-term viability. Companywide, our approach to water stewardship is defined at the corporate level, but goals and targets are set by each facility to ensure ownership and accountability. We work closely and collaboratively with federal, state and local municipalities to address complex issues and jointly develop solutions. Finally, every facility invests capital annually to make sure it stays in alignment with and committed to our Environmental Policy while appropriately addressing local challenges.
We track both total water use and water intensity (water use per pound of finished product, including by-products) to consistently identify opportunities for improvements, irrespective of changes in production.
Using the World Resources Institute Aqueduct Water Risk Atlas, we also conduct a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to water-related risks.

Estágio da cadeia de valor
Cadeia de fornecimento

Abrangência
Parcial

Procedimento de avaliação de riscos
Os riscos hídricos são avaliados como parte de uma estrutura estabelecida de gestão de riscos corporativos

Frequência da avaliação
Mais de uma vez por ano

Até que momento no futuro os riscos são levados em consideração?
De 3 a 6 anos

Tipo de ferramentas e métodos usados
Ferramentas existentes no mercado
Bancos de dados

Ferramentas e métodos usados
WRI Aqueduct
Bancos de dados do governo regional

Questões contextuais levadas em consideração
Disponibilidade de água no nível da bacia/captação
Qualidade da água no nível da bacia/captação
Conflitos entre as partes interessadas a respeito dos recursos hídricos no nível da bacia ou do represamento
Implicações da água para as principais commodities/matérias-primas
Marcos regulatórios referentes à água
Condições dos ecossistemas e habitats

Partes interessadas levadas em consideração
Clientes

Comentários
In Brazil, the pork and poultry supply chain 100% of integrated producers receive visits and technical assistance from the Company. Checklists are applied to identify the water source in the farm. The supplier is not allowed to supply to JBS if the farm couldn't guarantee free water demand to the animals. For cattle suppliers, JBS made progress in its Supply Chain Protocol certifying compliance. The Protocol follow with the suppliers, by third part audit, what is the source of water in the farm.

W3.3b

(W3.3b) Descreva o processo utilizado pela organização para identificar, avaliar e responder aos riscos hídricos em suas operações diretas e em outros estágios da cadeia de valor.

In order to be prepared to water risks as water scarcity and its consequences, JBS established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by corporate environmental managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical facilities by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. The data used for the analysis are updated annually by the Credit 360 tool, which generates KPIs. JBS also uses other tools to manage water risks in direct operations such as WRI's Aqueduct tool and qualitative and quantitative maps of water availability prepared by the Brazilian National Water Agency (ANA). The Brazilian National Water Agency (ANA) is also monitored in order to assess water regulatory frameworks.

The Watershed Committee provides inputs and visibility from the watershed risk assessment regarding water availability at catchment level, water quality at catchment level, stakeholder conflicts concerning water resources at catchment level. The pork, poultry and cattle production depend on water availability and to monitor scarcity risk is integrated to the company strategy.

Based on the KPIs analyses and the Committee outputs the leadership can define the strategy to the business related to water management.

The company has already conducted Water Footprint studies to some products through the ISO 14046:2014 methodology, aiming at analyzing the direct and indirect use of water resources, that is, the total volume of fresh water used to manufacture its products. The outputs from these project guided JBS into some actions plans, focused on JBS operations and its supply chain.

The president of the Water Committee is the JBS Director of Sustainability that is also member of the Socio-Environmental Responsibility Committee. He is in responsible to report the main sustainability concerns and strategy to the Socio-Environmental Responsibility Committee. Water-related risks and opportunities are fully integrated to these Committees.

The Socio-Environmental Responsibility Committee advises the Board of Directors in relation to sustainability risks and opportunities. Accordingly, the committee is responsible for connecting all topics related to the Company's business in a global perspective, including: identification, addressing and treatment of critical issues that result in risks or impacts on business; monitoring and implementation of policies, strategies and specific initiatives; and evaluation of proposed sustainability investments. There are four members on the Committee which reports directly to the Board of Directors. The Board's Chairman also joined the Socio-Environmental Responsibility Committee in 2019.

The supply chain evaluation varies according to the supplier. Poultry and Pork suppliers receive technical visits, in order to interact and improve the management of water need to guarantee the animal welfare. Also, water use is also evaluated through a form in its periodical visits. Those aspects are taken into consideration in the water assessment. For cattle suppliers, JBS has implemented the Supply Chain Protocol certifying compliance with criteria that assure food safety and meet the highest standards of customers and consumers. The Protocol follow with the suppliers, by third part audit, what is the source of water in the farm. JBS also addressed long term reduction goals. The Brazil operation set to reduce water-use intensity by 15% until 2030 based on 2019 average baseline.

W4. Riscos e oportunidades

W4.1

(W4.1) Foi identificado algum risco hídrico inerente com potencial para causar um impacto financeiro ou estratégico considerável nos negócios?

Sim, tanto nas operações diretas quanto no restante da cadeia de valor

W4.1a

(W4.1a) Como a organização define um impacto financeiro ou estratégico significativo nos seus negócios?

The company recognizes its risk exposures due to water dependence on direct operations and on its value chain. The most important aspects that could cause a financial risk for JBS and its supply chain is the water availability and regulatory framework changes. Therefore, in order to manage the financial and operation risks related to water use, JBS develops water risk assessments based on different scenarios and available tools, such as risk maps released by the Brazilian National Water Agency (ANA), Aqueduct (WRI) tool and the LCA - Life Cycle Analyses methodology, as well as the methodology set by the PGSA Program – this one is the most important evaluation tool for JBS which was developed customized to JBS scenario.

To define if the impact is substantive for the financial or strategic of JBS, JBS uses the Sustainable Water Management Program (PGSA) implemented in Brazil, were JBS evaluates each unit using two “Water Criticality Matrix”. The first matrix is based in the units’ internal information relating to the impacts of water shortage and the importance of water to these units’ strategy. The second matrix aims to identify critical river basins using a regional government database provided by Brazilian National Water Agency to quantify the river basin water balance. The combined matrices generate a water risk scoring for all units: the water criticality indicator.

The water criticality indicator is composed of two risk categories: occurrence risk (80%) and consequence severity (20%). The company has set a minimum score for the units to be considered exposed to water risk.

Once the risks are identified, the process follows a methodology issued by the Socio-Environmental Responsibility Committee seeking to assess and prioritize the risks and opportunities within the Company. The main steps are described below:

(a) Description of risks and opportunities identified, the mapping process is performed by the Technical Team.

(b) Analysis of mapped risks and opportunities and their prioritization. This step is based on business impact and likelihood of occurrence.

i) Each risk or opportunity is classified as consequence of its impact on business and its likelihood of occurrence. It is developed under three different scenarios: short, medium and long term.

ii) The Socio-Environmental Responsibility Committee focuses in the Action Plan on the short-term scenario with risks / opportunities classified as high impact to business and high probability of occurrence; or medium and high likelihood of occurrence; or high and medium probability impact. In these scenarios of medium and long term, only the risks/ opportunities classified with high business impact and high probability of occurrence are object of attention of the Socio-Environmental Responsibility Committee.

(c) The risks have been studied to be transformed into opportunities.

Due to the water-risk management process adopted by the Company, JBS could show a progress related to financial impacts stewardship concerning water scarcity.

Comparing the financial impacts caused by water issues, from 2021 to 2020 JBS had an increase of 10% in the quantity of investments to mitigate the impacts generated.

The units that faced negative impacts in 2021 represents 10% of JBS production and none of them interrupt their activities due to water stress problems.

In 2021, the Company invested R$ 120 million modernizing and improving efficiency of wastewater treatment.

The water issues for the supply chain can also generate substantial financial impact. One of the main risks relates to the animal’s lives. In order to mitigate risks to the poultry and pork suppliers, producers receive technical visits and the water supply is one of the aspects evaluated by JBS in its periodical visits. Those aspects are considered in the supplier homologation process. For cattle suppliers, JBS has implemented the Supply Chain Protocol certifying compliance with criteria that assure food safety and meet the highest standards of customers and consumers. The Protocol also checks, by third part audit, the source of water available in the supplier’s farms. Also, JBS developed the Grade 10 Farm (Fazenda Nota 10) program, which offers training for high-performance management, allowing the results of beef cattle farms in Brazil to be maximized.

Developed by the Company in partnership with the Instituto Inttegra, the program is aimed at livestock producers throughout the country.

W4.1b

(W4.1b) Qual é o número total de instalações expostas a riscos hídricos com potencial para causar um impacto financeiro ou estratégico significativo nos negócios, e que proporção das instalações da empresa como um todo isso representa?

	Número total de instalações expostas a riscos hídricos	Porcentagem das instalações da empresa como um todo que isso representa	Comentários
Linha 1	36	1-25	In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS’s growth, it established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit’s exposure to shortage risk.

W4.1c

(W4.1c) Qual é o número e a proporção de instalações por bacia hidrográfica expostas a riscos hídricos que podem ter um impacto financeiro ou estratégico significativo para os negócios, e qual é o potencial impacto nos negócios associado a essas instalações?

País/área e Bacia hidrográfica

Brasil	Amazonas

Número de instalações expostas a riscos hídricos

6

Porcentagem das instalações da empresa como um todo que isso representa
1-25

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, was established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. In addition, we complete the analysis using WRI's Aqueduct.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (East Atantic)

Número de instalações expostas a riscos hídricos
2

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, was established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. In addition, we complete the analysis using WRI's Aqueduct.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Eastern Northeast Atlantic)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
Menos de 1%

Comentários
In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, was established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. In addition, we complete the analysis using WRI's Aqueduct.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Southeast Atlantic)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
Menos de 1%

Comentários
In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, was established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. In addition, we complete the analysis using WRI's Aqueduct.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (South Atlantic)

Número de instalações expostas a riscos hídricos
4

Porcentagem das instalações da empresa como um todo que isso representa
1-25

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, was established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. In addition, WRI's Aqueduct system was used in parallel to add to the analyses.

País/área e Bacia hidrográfica

Brasil	Paraná

Número de instalações expostas a riscos hídricos
12

Porcentagem das instalações da empresa como um todo que isso representa
1-25

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, was established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. In addition, WRI's Aqueduct system was used in parallel to add to the analyses.

País/área e Bacia hidrográfica

Brasil	Tocantins

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
Menos de 1%

Comentários
In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, was established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. In addition, WRI's Aqueduct system was used in parallel to add to the analyses.

País/área e Bacia hidrográfica

Brasil	Uruguai

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
In Brazil, due to the increased concern for water scarcity and its relevance in constraining JBS's growth, was established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. In addition, WRI's Aqueduct system was used in parallel to add to the analyses.

País/área e Bacia hidrográfica

Porto Rico	Outro, especifique (Plata)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.
The water risk assessment is a critical element of our water stewardship strategy and allows us to identify and prioritize water resource projects that are locally relevant to

each watershed and reduce the company's overall water impact.

País/área e Bacia hidrográfica

Austrália	Outro, especifique (Maribyrnong)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
Menos de 1%

Comentários
Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility every 3 years, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.

País/área e Bacia hidrográfica

México	Outro, especifique (Laja)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.
The water risk assessment is a critical element of our water stewardship strategy and allows us to identify and prioritize water resource projects that are locally relevant to each watershed and reduce the company's overall water impact.

País/área e Bacia hidrográfica

México	Outro, especifique (San Luis Potosi)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários

Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.
The water risk assessment is a critical element of our water stewardship strategy and allows us to identify and prioritize water resource projects that are locally relevant to each watershed and reduce the company's overall water impact.

País/área e Bacia hidrográfica

México	Outro, especifique (Moctezuma)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.
The water risk assessment is a critical element of our water stewardship strategy and allows us to identify and prioritize water resource projects that are locally relevant to each watershed and reduce the company's overall water impact.

País/área e Bacia hidrográfica

Austrália	Outro, especifique (Maribymong)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.
The water risk assessment is a critical element of our water stewardship strategy and allows us to identify and prioritize water resource projects that are locally relevant to each watershed and reduce the company's overall water impact.

País/área e Bacia hidrográfica

Austrália	Outro, especifique (Wakefield)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.
The water risk assessment is a critical element of our water stewardship strategy and allows us to identify and prioritize water resource projects that are locally relevant to each watershed and reduce the company's overall water impact.

País/área e Bacia hidrográfica

Estados Unidos da América	Outro, especifique (Santa Ana)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.
The water risk assessment is a critical element of our water stewardship strategy and allows us to identify and prioritize water resource projects that are locally relevant to each watershed and reduce the company's overall water impact.

País/área e Bacia hidrográfica

Estados Unidos da América	Outro, especifique (St. Joseph)

Número de instalações expostas a riscos hídricos
1

Porcentagem das instalações da empresa como um todo que isso representa
Menos de 1%

Valor de produção para as atividades no setor de metais e mineração associadas a essas instalações
<Not Applicable>

Porcentagem de geração anual de eletricidade da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem do volume global de produção de petróleo e gás da empresa que poderá ser afetada por essas instalações
<Not Applicable>

Porcentagem da receita global total da empresa que poderá ser afetada
1-10

Comentários
Using the World Resources Institute Aqueduct Water Risk Atlas, JBS USA conducts a comprehensive water risk assessment at each facility, inclusive of quantity (baseline water stress, inter-annual variability, seasonal variability, flood occurrence, drought severity, upstream storage and groundwater storage), quality (return flow ratio and upstream protected land) and regulatory and reputational risk (media coverage, access to water and threatened amphibians). The assessment identifies areas with higher exposure to aforementioned water-related risks.
The water risk assessment is a critical element of our water stewardship strategy and allows us to identify and prioritize water resource projects that are locally relevant to each watershed and reduce the company's overall water impact.

W4.2

(W4.2) Dê detalhes sobre os riscos identificados nas operações diretas da organização com potencial para causar um impacto financeiro ou estratégico significativo para seus negócios, e descreva a resposta a esses riscos.

País/área e Bacia hidrográfica

Brasil	Paraná

Tipo de risco e Principal fator de risco

Físico agudo	Outro, especifique (Increased water scarcity)

Principal impacto potencial
Redução ou interrupção da capacidade produtiva

Descrição específica da empresa
The risk was identified through the Sustainable Water Management Program (PGSA) and reinforced with a study of climate scenarios carried out in 2020. The Parana basin and the Amazon basin are the ones that contain the factories that, together, have greater relevance based on volume production of JBS (15%) - there are 7 Seara factories in the Parana basin, in addition to hatchery and feed factory. According to studies, this region may have reduced water supply and cause a reduction in water available for operations.

Prazo
De hoje até um ano

Magnitude do potencial impacto
Média-baixa

Probabilidade
Mais provável que improvável

É possível indicar um valor para o potencial impacto financeiro?
Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)
9000000

Valor do potencial impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor do potencial impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do impacto financeiro
Taking into account the operations mentioned before that may have decrease in water supply, to calculate the potential financial impact of this issue, it was considered that during these events of water scarcity (2 months a year), 30% of the volume of water consumed by these operations has to come from alternative sources, which leads to an increase in operating costs of up to R$5.5 / m³. So that would cost R$ 9 million annually.

Principal resposta ao risco
Adotar práticas de eficiência, reutilização, reciclagem e conservação da água

Descrição da resposta
Monitor weather forecasts and prevent droughts through water-saving actions and efficient reuse

Custo da resposta
3500000

Explicação do custo da resposta
The costs, annually, are related to the purchase of new equipment more efficient in water use, as well as the development of new projects to reduce water consumption and / or increase the volume of reuse water. There are sites that are developed studies for the construction of ponds for water storage, as a measure of contingency in periods of extreme scarcity. The total JBS investments in water infrastructure 2021 were R$ 120 million The investments in these facilities in order to avoid this risk were around R$ 3.5 million.

País/área e Bacia hidrográfica

Brasil	Amazonas

Tipo de risco e Principal fator de risco

Físico agudo	Outro, especifique (Increased water scarcity)

Principal impacto potencial
Redução ou interrupção da capacidade produtiva

Descrição específica da empresa
The risk was identified through the Sustainable Water Management Program (PGSA) and reinforced with a study of climate scenarios carried out in 2020. The Parana basin and the Amazon basin are the ones that contain the factories that, together, have greater relevance based on volume production of JBS (15%) - there are 5 Friboi factories and 2 JBS Couros factory in the Amazon basin. According to studies, this region may have reduced water supply and cause a reduction in water available for operations.

Prazo
De hoje até um ano

Magnitude do potencial impacto
Média-baixa

Probabilidade
Mais provável que improvável

É possível indicar um valor para o potencial impacto financeiro?

Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)
3700000

Valor do potencial impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor do potencial impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do impacto financeiro
Taking into account the operations mentioned before that may have decrease in water supply, to calculate the potential financial impact of this issue, it was considered that during these events of water scarcity (2 months a year), 30% of the volume of water consumed by these operations has to come from alternative sources, which leads to an increase in operating costs of up to R$55 / m³. So that would cost R$ 3.7 million annually.

Principal resposta ao risco
Adotar práticas de eficiência, reutilização, reciclagem e conservação da água

Descrição da resposta
Monitor weather forecasts and prevent droughts through water-saving actions and efficient reuse

Custo da resposta
1100000

Explicação do custo da resposta
The costs, annually, are related to the purchase of new equipment more efficient in water use, as well as the development of new projects to reduce water consumption and / or increase the volume of reuse water. There are sites that are developed studies for the construction of ponds for water storage, as a measure of contingency in periods of extreme scarcity. The total JBS investments in water in 2021 were R$ 120 million. The investments in these facilities in order to avoid this risk were around R$ 1.1 million.

W4.2a

(W4.2a) Dê detalhes sobre os riscos identificados nas operações diretas com potencial para causar um impacto financeiro ou estratégico significativo nos negócios e a resposta a esses riscos.

País/área e Bacia hidrográfica

Brasil	Paraná

Estágio da cadeia de valor
Cadeia de fornecimento

Tipo de risco e Principal fator de risco

Físico crônico	Escassez de água

Principal impacto potencial
Redução ou interrupção da capacidade produtiva

Descrição específica da empresa
Potential Risks to agriculture in certain regions due to changes in water availability. JBS main business are cattle, poultry, pork which production depends directly on water availability.

Prazo
1-3 anos

Magnitude do potencial impacto
Média-alta

Probabilidade
Mais provável que improvável

É possível indicar um valor para o potencial impacto financeiro?
Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)
17500000

Valor do potencial impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor do potencial impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do impacto financeiro
The value refers to the amount of revenue obtained by the units located in this river basin that may be associated with the reported impacts.

Principal resposta ao risco

Operações diretas	Melhorar o alinhamento da nossa atividade de influência sobre as políticas públicas com nossos compromissos com a governança da água

Descrição da resposta
Improvement of existing actions in the company's risk management, with the development modeling that allow to evaluate the impacts and recommend necessary measures. Engage on the risk mitigation on the watershed. Implement a fund in the case is necessary to buy cattle, poultry, pork from suppliers located in another watershed.

Custo da resposta
1750000

Explicação do custo da resposta
The fund value was estimated as 10% from the financial impact cost.

País/área e Bacia hidrográfica

Brasil	Amazonas

Estágio da cadeia de valor
Cadeia de fornecimento

Tipo de risco e Principal fator de risco

Físico crônico	Escassez de água

Principal impacto potencial
Redução ou interrupção da capacidade produtiva

Descrição específica da empresa
Potential Risks to agriculture in certain regions due to changes in water availability. JBS main business are cattle, poultry, pork which production depends directly on water availability.

Prazo
1-3 anos

Magnitude do potencial impacto
Média-alta

Probabilidade
Mais provável que improvável

É possível indicar um valor para o potencial impacto financeiro?
Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)
14000000

Valor do potencial impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor do potencial impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do impacto financeiro
The value refers to the amount of revenue obtained by the units located in this river basin that may be associated with the reported impacts.

Principal resposta ao risco

Operações diretas	Melhorar o alinhamento da nossa atividade de influência sobre as políticas públicas com nossos compromissos com a governança da água

Descrição da resposta
Improvement of existing actions in the company's risk management, with the development modeling that allow to evaluate the impacts and recommend necessary measures. Engage on the risk mitigation on the watershed. Implement a fund in the case is necessary to buy cattle, poultry, pork from suppliers located in another watershed.

Custo da resposta
1400000

Explicação do custo da resposta
The fund value was estimated as 10% from the financial impact cost.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Paraguay)

Estágio da cadeia de valor
Cadeia de fornecimento

Tipo de risco e Principal fator de risco

Físico agudo	Inundação (costeira, fluvial, pluvial, de águas subterrâneas)

Principal impacto potencial
Redução ou interrupção da capacidade produtiva

Descrição específica da empresa
Extreme rains can affect agricultural production, with flooding and loss of production areas. Floods can also affect the logistic distribution of products to customers.

Prazo
1-3 anos

Magnitude do potencial impacto
Média-alta

Probabilidade
Mais provável que improvável

É possível indicar um valor para o potencial impacto financeiro?
Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)
3300000

Valor do potencial impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor do potencial impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do impacto financeiro
The value refers to the amount of revenue obtained by the units located in this river basin that may be associated with the reported impacts.

Principal resposta ao risco

Operações diretas	Melhorar o alinhamento da nossa atividade de influência sobre as políticas públicas com nossos compromissos com a governança da água

Descrição da resposta
Improvement of existing actions in the company's risk management, with the development modeling that allow to evaluate the impacts and recommend necessary measures.

Custo da resposta
0

Explicação do custo da resposta
The action does not have significant costs.

País/área e Bacia hidrográfica

Brasil	Outro, especifique (South Atlantic)

Estágio da cadeia de valor
Cadeia de fornecimento

Tipo de risco e Principal fator de risco

Físico crônico	Escassez de água

Principal impacto potencial
Redução ou interrupção da capacidade produtiva

Descrição específica da empresa
Potential Risks to agriculture in certain regions due to changes in water availability. JBS main business are cattle, poultry, pork which production depends directly on water availability.

Prazo
1-3 anos

Magnitude do potencial impacto
Média-alta

Probabilidade
Mais provável que improvável

É possível indicar um valor para o potencial impacto financeiro?
Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)
825000

Valor do potencial impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor do potencial impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do impacto financeiro
The value refers to the amount of revenue obtained by the units located in this river basin that may be associated with the reported impacts.

Principal resposta ao risco

Operações diretas	Melhorar o alinhamento da nossa atividade de influência sobre as políticas públicas com nossos compromissos com a governança da água

Descrição da resposta
Improvement of existing actions in the company's risk management, with the development modeling that allow to evaluate the impacts and recommend necessary measures. Engage on the risk mitigation on the watershed. Implement a fund in the case is necessary to buy cattle, poultry, pork from suppliers located in another watershed.

Custo da resposta
82500

Explicação do custo da resposta
The fund value was estimated as 10% from the financial impact cost.

W4.3

(W4.3) Foi identificada alguma oportunidade relacionada à água com potencial para causar um impacto financeiro ou estratégico significativo nos negócios?
Sim, identificamos oportunidades, e algumas/todas estão sendo realizadas

W4.3a

(W4.3a) Dê detalhes das oportunidades que estão sendo realizadas no momento e que podem causar um impacto financeiro ou estratégico significativo para os negócios.

Tipo de oportunidade
Eficiência

Principal oportunidade relacionada à água
Melhor eficiência hídrica nas operações

Descrição e estratégia específicas da empresa para materializar a oportunidade
The reduction in the use of natural resources such as water promotes reductions in cost, since it reduces the amount spent for water and wastewater treatment.
JBS's strategy for cost savings encompasses several actions in reducing the amount of water used in industrial processes, decreasing costs with water consumption and effluent treatment.
A diagnosis of all operations is carried out through a corporate action plan, which identifies areas of higher water consumption and opportunities for improvements in production process. All units are encouraged to identify opportunities and to develop projects to improve water use efficiency and reduce water consumption. Besides that, JBS's units have established water consumption Targets. The Targets are based on the performance and production volume and each unit is encouraged to develop programs and projects for the sustainable water use in their industrial processes.
In the recurtition process we used a lot of water to process leathers in the dilution of chemicals, in washers and in other processes, and we see the possibility of reducing some processes of washing to save water and be more sustainable. follows
below the results achieved. Estimated reduction 2.200 m3/month.
Also, to increase brand value, efficiency is essential, JBS acts on the access to new markets/ new trends of more sustainable products (with lower environmental impacts). Specific communication of projects aiming the improvement of water use efficiency in JBS, generating recognition due to the results achieved. JBS has projects to establish partnerships with clients, to make its products a leading reference in sustainability, aiming to reduce environmental impacts and promote improvement. One example is the Kind Leather, a revolutionary type of leather, developed by JBS Couros. With a patent filed by the Company, Kind Leather uses a production process that reduces water consumption by 52 L/m2.

Prazo estimado para a realização
De 1 a 3 anos

Magnitude do potencial impacto financeiro
Média

É possível indicar um valor para o potencial impacto financeiro?
Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)
5000000

Valor do potencial impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor do potencial impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do impacto financeiro
JBS encourages its collaborators to develop projects to make the water use more efficient in different processes which allows the expansion of the projects in the other units of the group, maximizing the results obtained. Considering a reduction of 3% annually, in order to achieve 30% reduction by 2030 and JBS' 2021 water consumed (177 million m3) and wastewater treatment volume (150 million m3) and costs with water treatment around 0.44 R$/m3 and wastewater treatment around 0.65 R$/m3, so that would give us a reduction of 2.000.000 BRL per year with water treatment. Also, considering that wastewater treatment would be affected positively, once the volume of wastewater would consequently also be reduced by 3% annually, that would give us a reduction of 3.000.000 BRL. The final financial impact would be around 5 million BRL.

Tipo de oportunidade
Mercados

Principal oportunidade relacionada à água
Aumento no valor acionário

Descrição e estratégia específicas da empresa para materializar a oportunidade
To increase shareholder value, JBS works on ensuring the sustainability on its business through a water- risk assessment and the disclosure of its actions. In order to

increase efficiency and avoid shortages, JBS established the Sustainable Water Management Program (PGSA) that aims to identify critical areas and prioritize facilities and river basins to mitigate the risk of shortfalls and increase usage efficiency, in addition to measuring water-related financial impacts and providing strategic tools and methodologies. JBS's actions on water management are disclosed on its sustainability report. This report provides the investor vital information on water management, disclosing JBS's actions to ensure production in times of water shortage. JBS's transparency on CDP Water report and its good performance in relation to other companies in Latin America, brings security to its investors.mitigate the risk of shortfalls and increase usage efficiency, in addition to measuring water-related financial impacts and providing strategic tools and methodologies.

Prazo estimado para a realização
Hoje - até 1 ano

Magnitude do potencial impacto financeiro
Média

É possível indicar um valor para o potencial impacto financeiro?
Sim, uma faixa estimada

Valor do potencial impacto financeiro (moeda)
<Not Applicable>

Valor do potencial impacto financeiro – mínimo (moeda)
50000

Valor do potencial impacto financeiro – máximo (moeda)
100000

Explicação do impacto financeiro

The cost is related to the corporate management of the project and its updating.

W5. Contabilização da água no nível das instalações

W5.1

(W5.1) Para cada instalação mencionada em W4.1c, dê as coordenadas, os dados de contabilização da água e uma comparação com o ano de reporte anterior.

Número de referência da instalação
Instalação 1

Nome da instalação (opcional)
Facility 1

País/área e Bacia hidrográfica

Brasil	Outro, especifique (East Atlantic)

Latitude
-15.25389

Longitude
-40.25019

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
259.21

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
259.21

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
224.7

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
224.7

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
34.51

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded

Número de referência da instalação
Instalação 2

Nome da instalação (opcional)
Facility 2

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-16.67902

Longitude
-49.25639

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
507.78

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
507.78

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
639.55

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
639.55

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas

0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
-131.77

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
The total of water discharged is greater than the total withdrawal due to the fact that the facility is treating wastewater from other JBS facility.

Número de referência da instalação
Instalação 3

Nome da instalação (opcional)
Facility 3

País/área e Bacia hidrográfica

Brasil	Amazonas

Latitude
-6.75212

Longitude
-51.14101

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
320.4

Comparação da captação total com o ano de reporte anterior
Mais alto

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
76.55

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
243.85

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
305.01

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
305.01

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
15.39

Comparação do consumo total com o ano de reporte anterior
Mais alto

Explique
Increased production volume and consequently water consumption.

Número de referência da instalação
Instalação 4

Nome da instalação (opcional)
Facility 4

País/área e Bacia hidrográfica

Brasil	Amazonas

Latitude
-9.87622

Longitude
-56.08617

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
546.48

Comparação da captação total com o ano de reporte anterior
Mais alto

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
546.48

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
507.36

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
419.83

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
39.11

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
The decrease in consumption is justified by the projects to reduce water consumption implemented.

Número de referência da instalação
Instalação 5

Nome da instalação (opcional)
Facility 5

País/área e Bacia hidrográfica

Brasil	Amazonas

Latitude
-10.80594

Longitude
-55.44643

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
376.74

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
372.23

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
4.51

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
372.37

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
191.43

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
4.37

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
Decreased production volume and consequently water consumption.

Número de referência da instalação
Instalação 6

Nome da instalação (opcional)
Facility 6

País/área e Bacia hidrográfica

Brasil	Tocantins

Latitude
-10.65788

Longitude
-51.57927

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
524.18

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
524.18

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
443.11

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
162.39

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
81.07

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 7

Nome da instalação (opcional)
Facility 7

País/área e Bacia hidrográfica

Brasil	Amazonas

Latitude
-9.87357

Longitude
-67.80749

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
260.15

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
260.15

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável

0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
234.13

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
234.13

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
26.01

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded

Número de referência da instalação
Instalação 8

Nome da instalação (opcional)
Facility 8

País/área e Bacia hidrográfica

Brasil	Amazonas

Latitude
-11.70171

Longitude
-62.7188

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
622.56

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
622.56

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
574.34

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
574.34

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
48.22

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
The decrease in consumption is justified by the projects to reduce water consumption implemented.

Número de referência da instalação
Instalação 9

Nome da instalação (opcional)
Facility 9

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Eastern Northeast Atlantic)

Latitude
-24.96317

Longitude
-53.45366

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
64.54

Comparação da captação total com o ano de reporte anterior
Mais alto

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
61.04

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
3.5

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
0

Comparação das descargas totais com o as do ano de reporte anterior
Mais baixo

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
64.54

Comparação do consumo total com o ano de reporte anterior
Mais alto

Explique
Increased production volume and consequently water consumption.

Número de referência da instalação
Instalação 10

Nome da instalação (opcional)
Facility 10

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-18.4028

Longitude
-49.20779

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
656.12

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
612.78

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
43.34

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
491.91

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
164.21

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
The decrease in consumption is justified by the projects to reduce water consumption implemented.

Número de referência da instalação
Instalação 11

Nome da instalação (opcional)
Facility 11

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-18.9188

Longitude
-48.27835

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
247.94

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
204.4

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
43.55

Total das descargas de água nesta instalação (megalitros/ano)
177.2

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
177.2

Total de água consumido nesta instalação (megalitros/ano)
70.74

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 12

Nome da instalação (opcional)
Facility 12

País/área e Bacia hidrográfica

Brasil	Amazonas

Latitude
-10.80594

Longitude
-55.44643

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
246.45

Comparação da captação total com o ano de reporte anterior
Mais baixo

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
246.45

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
256.99

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
-10.55

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
Decreased production volume and consequently water consumption.

Número de referência da instalação
Instalação 13

Nome da instalação (opcional)
Facility 13

País/área e Bacia hidrográfica

Brasil	Outro, especifique (East Atlantic)

Latitude
-22.78337

Longitude
-43.02426

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
1128.99

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
1128.99

Total das descargas de água nesta instalação (megalitros/ano)
891.98

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
891.98

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
237

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 14

Nome da instalação (opcional)
Facility 14

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-15.77795

Longitude
-47.92865

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
1870.08

Comparação da captação total com o ano de reporte anterior
Mais baixo

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
1308.98

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
561.1

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas

0

Total das descargas de água nesta instalação (megalitros/ano)
1806

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
1729.96

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
76.04

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
64.08

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
The decrease in consumption is justified by the projects to reduce water consumption implemented.

Número de referência da instalação
Instalação 15

Nome da instalação (opcional)
Facility 15

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-15.77795

Longitude
-47.92865

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
27.17

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
27.17

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
0

Comparação das descargas totais com o as do ano de reporte anterior
Selecione

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
27.17

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 16

Nome da instalação (opcional)
Facility 16

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-15.77795

Longitude
-47.92865

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
48.43

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
48.43

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
0

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
48.43

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 17

Nome da instalação (opcional)
Facility 17

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-22.22872

Longitude
-54.81098

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
2421.65

Comparação da captação total com o ano de reporte anterior
Mais alto

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
551.9

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
1869.76

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
2092.86

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
2081.96

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
10.9

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
328.79

Comparação do consumo total com o ano de reporte anterior
Mais alto

Explique
Increased production volume and consequently water consumption.

Número de referência da instalação
Instalação 18

Nome da instalação (opcional)
Facility 18

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-22.22872

Longitude
-54.81098

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
0

Comparação da captação total com o ano de reporte anterior
Mais baixo

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
0

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
0

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
The feed factory (facility 18) is in the same location as the slaughter (facility 17), and for this reason the effluent is counted together with the slaughter effluent, we do not segregate it for the feed factory. The facility 18 is a very small operation, which practically does not generate effluent.

Número de referência da instalação
Instalação 19

Nome da instalação (opcional)
Facility 19

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-22.22872

Longitude
-54.81098

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
3.7

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
3.7

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
0

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
3.7

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded. There is no effluent in a poultry farm, so the total discharge is 0.

Número de referência da instalação
Instalação 20

Nome da instalação (opcional)
Facility 20

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-22.22872

Longitude
-54.81098

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
10.83

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
10.83

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
0

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
10.83

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 21

Nome da instalação (opcional)
Facility 21

País/área e Bacia hidrográfica

Brasil	Outro, especifique (Southeast Atlantic)

Latitude
-22.78699

Longitude
-43.31293

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
393.72

Comparação da captação total com o ano de reporte anterior
Mais alto

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
388.8

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
4.92

Total das descargas de água nesta instalação (megalitros/ano)

223.18

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
223.18

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
170.54

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
Increased production volume and consequently water consumption.

Número de referência da instalação
Instalação 22

Nome da instalação (opcional)
Facility 22

País/área e Bacia hidrográfica

Brasil	Outro, especifique (South Atlantic)

Latitude
-29.16755

Longitude
-51.17889

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
390.21

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
172.73

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
217.48

Total das descargas de água nesta instalação (megalitros/ano)
348.39

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
348.39

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
41.83

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 23

Nome da instalação (opcional)
Facility 23

País/área e Bacia hidrográfica

Brasil	Outro, especifique (South Atlantic)

Latitude
-29.16755

Longitude
-51.17889

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
656.55

Comparação da captação total com o ano de reporte anterior
Mais alto

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
109.17

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
145.77

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
401.61

Total das descargas de água nesta instalação (megalitros/ano)
591.34

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
591.34

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
65.21

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
Decreased production volume and consequently water consumption.

Número de referência da instalação

Instalação 24

Nome da instalação (opcional)
Facility 24

País/área e Bacia hidrográfica

Brasil	Outro, especifique (South Atlantic)

Latitude
-29.16755

Longitude
-51.17889

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
6

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
6

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
0

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
6

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 25

Nome da instalação (opcional)
Facility 25

País/área e Bacia hidrográfica

Brasil	Outro, especifique (South Atlantic)

Latitude
-29.16755

Longitude
-51.17889

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
36.78

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
36.78

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
36.78

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
14.17

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
14.17

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
22.61

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 26

Nome da instalação (opcional)
Facility 26

País/área e Bacia hidrográfica

Brasil	Negro (Uruguai)

Latitude
-27.45801

Longitude
-53.93073

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
526.79

Comparação da captação total com o ano de reporte anterior
Mais alto

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
371.02

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0.98

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
151.23

Total das descargas de água nesta instalação (megalitros/ano)
243.5

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
243.5

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
283.29

Comparação do consumo total com o ano de reporte anterior
Mais alto

Explique
Increased production volume and consequently water consumption.

Número de referência da instalação
Instalação 27

Nome da instalação (opcional)
Facility 27

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-23.53065

Longitude
-46.78635

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
154.49

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
154.49

Captação de águas subterrâneas - não-renovável

0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
154.49

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
154.49

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
0

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
The decrease in consumption is justified by the projects to reduce water consumption implemented.

Número de referência da instalação
Instalação 28

Nome da instalação (opcional)
Facility 28

País/área e Bacia hidrográfica

Brasil	Paraná

Latitude
-23.71205

Longitude
-46.41758

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
103.58

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
101.24

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
2.35

Total das descargas de água nesta instalação (megalitros/ano)
102.05

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
102.05

Total de água consumido nesta instalação (megalitros/ano)
1.53

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
Decreased production volume and consequently water consumption.

Número de referência da instalação
Instalação 29

Nome da instalação (opcional)
Facility 29

País/área e Bacia hidrográfica

Porto Rico	Outro, especifique (Plata)

Latitude
18.140702

Longitude
-66.259681

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
428.54

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
400.85

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
27.7

Total das descargas de água nesta instalação (megalitros/ano)
303.75

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
31.74

Descargas em destinos terceirizados
272.01

Total de água consumido nesta instalação (megalitros/ano)
124.8

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
Decreased production volume and consequently water consumption.

Número de referência da instalação
Instalação 30

Nome da instalação (opcional)
Facility 30

País/área e Bacia hidrográfica

México	Outro, especifique (Laja)

Latitude
20.588793

Longitude
-100.389888

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
1220.28

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
1.22028

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
93815

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
938.15

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
282.13

Comparação do consumo total com o ano de reporte anterior
Mais baixo

Explique
No significant variations were recorded

Número de referência da instalação
Instalação 31

Nome da instalação (opcional)
Facility 31

País/área e Bacia hidrográfica

México	Outro, especifique (San Luis Potosi)

Latitude
22.156469

Longitude
-100.98554

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
268.33

Comparação da captação total com o ano de reporte anterior
Mais alto

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
196.8

Comparação das descargas totais com o as do ano de reporte anterior
Mais alto

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
196.8

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
71.54

Comparação do consumo total com o ano de reporte anterior
Mais alto

Explique
Increased production volume and consequently water consumption.

Número de referência da instalação
Instalação 32

Nome da instalação (opcional)
Facility 32

País/área e Bacia hidrográfica

México	Outro, especifique (Moctezuma)

Latitude
19.639212

Longitude
-99.166864

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
7.1

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
7.1

Total das descargas de água nesta instalação (megalitros/ano)
2.13

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
2.13

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
4.97

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded

Número de referência da instalação
Instalação 33

Nome da instalação (opcional)
Facility 33

País/área e Bacia hidrográfica

Austrália	Outro, especifique (Maribyrnong)

Latitude
-37.817349

Longitude
144.846536

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
817.27

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
817.27

Total das descargas de água nesta instalação (megalitros/ano)
760.08

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
760.08

Total de água consumido nesta instalação (megalitros/ano)
57.19

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded.

Número de referência da instalação
Instalação 34

Nome da instalação (opcional)
Facility 34

País/área e Bacia hidrográfica

Austrália	Outro, especifique (Wakefield)

Latitude
-34.184031

Longitude
138.153517

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
326.25

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas

326.25

Total das descargas de água nesta instalação (megalitros/ano)
24.8

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
24.8

Descargas em destinos terceirizados
0

Total de água consumido nesta instalação (megalitros/ano)
301.45

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded

Número de referência da instalação
Instalação 35

Nome da instalação (opcional)
Facility 35

País/área e Bacia hidrográfica

Estados Unidos da América	Outro, especifique (Santa Ana)

Latitude
33.9806

Longitude
-117.375494

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
115.75

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
0

Total das descargas de água nesta instalação (megalitros/ano)
115.75

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
115.75

Total de água consumido nesta instalação (megalitros/ano)
0

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded

Número de referência da instalação
Instalação 36

Nome da instalação (opcional)
Facility 36

País/área e Bacia hidrográfica

Estados Unidos da América	Outro, especifique (St. Joseph)

Latitude
41.681208

Longitude
-85.965624

Localizada em área de estresse hídrico
Sim

Fonte principal para a geração de eletricidade nesta instalação
<Not Applicable>

Divisão de negócios do setor de petróleo e gás
<Not Applicable>

Total de captação de água nesta instalação (megalitros/ano)
86.95

Comparação da captação total com o ano de reporte anterior
Igual

Captações de água doce de superfície, incluindo as águas de chuva, brejos, rios e lagos
0

Captação de água salobra de superfície/água do mar
0

Captação de águas subterrâneas - renovável
0

Captação de águas subterrâneas - não-renovável
0

Captação de água produzida/arrastada
0

Captação de fontes terceirizadas
86.95

Total das descargas de água nesta instalação (megalitros/ano)
86.75

Comparação das descargas totais com o as do ano de reporte anterior
Igual

Descargas em água doce superficial
0

Descargas em água salobra de superfície/água do mar
0

Descargas em águas subterrâneas
0

Descargas em destinos terceirizados
86.75

Total de água consumido nesta instalação (megalitros/ano)
0.2

Comparação do consumo total com o ano de reporte anterior
Igual

Explique
No significant variations were recorded

W5.1a

(W5.1a) Para as instalações mencionadas em W5.1, que proporção dos dados de contabilização da água foi verificada por terceiros?

Captação de água - volume total

Porcentagem verificada
26-50

Norma de verificação utilizada
JBS provides periodic reports on water withdrawal data to local environmental agencies and regulatory agencies regarding water resources management. Local environmental agencies perform periodic inspections in order to verify water withdrawal by source, volume of discharged wastewater, wastewater parameter, among other information. JBS created an internal data review process, which involves environmental corporative management, regional coordinators and unit supervisors. The company also receives several audits, with an external verification process, from its clients and other interested parties. In 2021, water withdrawals data in Brazil were audited by SGS, a Swiss company that is a world leader in inspection, verification, testing and certification, according to standards established by GRI.

Explique
<Not Applicable>

Captação de água – volume por fonte

Porcentagem verificada
26-50

Norma de verificação utilizada
JBS provides periodic reports on water withdrawal data to local environmental agencies and regulatory agencies regarding water resources management. Local environmental agencies perform periodic inspections in order to verify water withdrawal by source, volume of discharged wastewater, wastewater parameter, among other information. JBS created an internal data review process, which involves environmental corporative management, regional coordinators and unit supervisors. The company also receives several audits, with an external verification process, from its clients and other interested parties. In 2021, water withdrawals data in Brazil were audited by SGS, a Swiss company that is a world leader in inspection, verification, testing and certification, according to standards established by GRI.

Explique
<Not Applicable>

Captação de água – qualidade por parâmetro padrão de qualidade da água

Porcentagem verificada
26-50

Norma de verificação utilizada
JBS provides periodic reports on water withdrawal data to local environmental agencies and regulatory agencies regarding water resources management. Local environmental agencies perform periodic inspections in order to verify water withdrawal by source, volume of discharged wastewater, wastewater parameter, among other information. JBS created an internal data review process, which involves environmental corporative management, regional coordinators and unit supervisors. The company also receives several audits, with an external verification process, from its clients and other interested parties.

Explique
<Not Applicable>

Descargas de água – volume total

Porcentagem verificada
26-50

Norma de verificação utilizada
JBS provides periodic reports on water withdrawal data to local environmental agencies and regulatory agencies regarding water resources management. Local environmental agencies perform periodic inspections in order to verify water withdrawal by source, volume of discharged wastewater, wastewater parameter, among other information. JBS created an internal data review process, which involves environmental corporative management, regional coordinators and unit supervisors. The company also receives several audits, with an external verification process, from its clients and other interested parties. In 2021, water withdrawals data in Brazil were audited by SGS, a Swiss company that is a world leader in inspection, verification, testing and certification, according to standards established by GRI.

Explique
<Not Applicable>

Descargas de água – volume por destino

Porcentagem verificada
26-50

Norma de verificação utilizada
JBS provides periodic reports on water withdrawal data to local environmental agencies and regulatory agencies regarding water resources management. Local environmental agencies perform periodic inspections in order to verify water withdrawal by source, volume of discharged wastewater, wastewater parameter, among other information. JBS created an internal data review process, which involves environmental corporative management, regional coordinators and unit supervisors. The company also receives several audits, with an external verification process, from its clients and other interested parties. In 2021, water withdrawals data in Brazil were audited by SGS, a Swiss company that is a world leader in inspection, verification, testing and certification, according to standards established by GRI.

Explique
<Not Applicable>

Descargas de água – volume por nível de tratamento final

Porcentagem verificada
26-50

Norma de verificação utilizada
JBS provides periodic reports on water discharge data to local environmental agencies and regulatory agencies regarding water resources management. Local environmental agencies perform periodic inspections in order to verify water withdrawal by source, volume of discharged wastewater, wastewater parameter, among other information. JBS created an internal data review process, which involves environmental corporative management, regional coordinators and unit supervisors. The company also receives several audits, with an external verification process, from its clients and other interested parties.

Explique
<Not Applicable>

Descargas de água – qualidade por parâmetro de qualidade da água padrão

Porcentagem verificada
26-50

Norma de verificação utilizada
JBS provides periodic reports on water withdrawal data to local environmental agencies and regulatory agencies regarding water resources management. Local environmental agencies perform periodic inspections in order to verify water withdrawal by source, volume of discharged wastewater, wastewater parameter, among other information. JBS created an internal data review process, which involves environmental corporative management, regional coordinators and unit supervisors. The company also receives several audits, with an external verification process, from its clients and other interested parties. In 2021, water withdrawals data in Brazil were audited by SGS, a Swiss company that is a world leader in inspection, verification, testing and certification, according to standards established by GRI.

Explique
<Not Applicable>

Consumo de água – volume total

Porcentagem verificada
26-50

Norma de verificação utilizada
JBS provides periodic reports on water discharge data to local environmental agencies and regulatory agencies regarding water resources management. Local environmental agencies perform periodic inspections in order to verify water withdrawal by source, volume of discharged wastewater, wastewater parameter, among other information. JBS created an internal data review process, which involves environmental corporative management, regional coordinators and unit supervisors. The company also receives several audits, with an external verification process, from its clients and other interested parties.

Explique
<Not Applicable>

W6. Governança

W6.1

(W6.1) A organização dispõe de uma política hídrica?
Sim, temos uma política hídrica documentada publicamente disponível

W6.1a

(W6.1a) Selecione as opções que melhor descrevem o escopo e o conteúdo da política hídrica.

	Escopo	Conteúdo	Explique
Linha 1	Na empresa como um todo	Descrição das normas de desempenho em relação à água para as operações diretas Descrição das normas em relação à água para as aquisições Referência a normas internacionais e iniciativas de reconhecimento mundial relacionadas à água Objetivos e metas da empresa para a questão hídrica Compromisso de alinhar-se com iniciativas de políticas públicas, como os ODSs Compromisso com a conscientização e a formação das partes interessadas Compromisso com a governança da água e/ou a ação coletiva Reconhecimento das vinculações ambientais, por exemplo, devido às mudanças climáticas	JBS Materiality Matrix showed that water is one of the four aspects that are material to JBS businesses. The business depends on water to the food production and also to guarantee the main input animal protein. The company is dedicated to the responsible stewardship of the natural resources required and fundamental to produce products. Companywide, the approach to water stewardship is defined at the corporate level, but goals and targets are set by each facility to ensure ownership and accountability. The impact on water is due wastewater treatment considering the organic component treated that is strictly monitored in a continuous basis in order to address environmental legislation. Considering JBS business segment food production the policy foresees that all units around the word should follow the higher water standards and be in compliance with regulation regarding federal, state and local municipalities. It's a company-wide since all units have to control and track water aspects, covering water withdrawal, quality standards, discharge of wastewater and all legal aspects related. Through this data, it is possible to evaluate the efficiency of each unit and promote the development of actions with the objective to involve the water efficiency in the production process. JBS has an environmental policy for the entire company which preaches continuous improvement on water use efficiency. The company has a goal of reducing the intensity rate (m³/ton) of 15% in water withdrawals by 2030, taking 2019 average as the base year. JBS also has an Environmental Guide that establishes standard to guarantee that all units follow the same procedure. It defines also procedures to be followed by the value chain which guarantees commitment to water stewardship and collective action based on the size and impact from the value chain. It also explains how to use an internal software to report the consumption of water per ton of product, the cost of water and wastewater treatment per volume and other environmental aspects that make possible to evaluate units that need to improve its efficiency. The global policy and local procedures that address water use and wastewater discharge management evidence JBS' commitment to SDG 6 Clean Water and Sanitation. The Water Policy is part of the Business Goals Policies on which the company is committed to tackle climate change.

W6.2

(W6.2) Existe supervisão das questões hídricas por parte do conselho na organização?

Sim

W6.2a

(W6.2a) Identifique o(s) cargo(s) do(s) indivíduo(s) (não inclua nenhum nome) do Conselho com responsabilidade pelas questões hídricas.

Cargo do indivíduo	Explique
Presidente do Conselho	The Board Chair is the President of the Socio-Environmental Responsibility Committee (SERC). The SERCC is an assessment body linked to the board of directors to advise them regarding the risks and opportunities in sustainability initiatives. It is responsible for dealing and connecting subjects related to sustainability in the company's business, such as: identification, evaluation and treatment of critical issues that results in risks and business impact; monitoring and implementation of policies, strategies and actions; and evaluation of proposals for investments in sustainability. In this way, all relevant water issues are dealt by the Committee, under the president's coordination. In 2021, in order to improve the water management. it was defined to invest in eliminating water lose and leakage, and improving on the water capture and monitoring system, which improved the data quality monitored and reported through the monitoring system. The Sustainability area also reports to the SERC the performance of operations in relation to water consumption targets (reduce water-use intensity by 15% until 2030 based on 2019 baseline). The President is responsible for organizing and coordinating the Committee's activities, including, among other duties the investment approval in order to improve the wastewater treatment in order to increase the quality of water discharge on the rivers and to be in accordance with the local environmental legislation.
Diretor de Sustentabilidade (CSO)	The CSO is responsible to report the themes that should be discussed by the Socio-Environmental Responsibility Committee. The Socio-Environmental Responsibility Committee shall advise the Board of Directors regarding the risks and opportunities in sustainability initiatives. It is responsible for dealing with and connecting subjects related to sustainability in the company's business, such as: identification, evaluation and treatment of critical issues that results in risks and business impact; monitoring and implementation of policies, strategies and specific actions; and defining the investments that should be approved on the SERC. The Sustainability area also reports to the Socio-Environmental Responsibility Committee the performance of operations in relation to water consumption targets.
Comitê do conselho	The Socio-Environmental Responsibility Committee advises the Board of Directors regarding the risks and opportunities in sustainability initiatives. Accordingly, the committee is responsible for dealing and connecting all topics related to the Company's business in a global perspective, including: identification, addressing and treatment of critical issues that result in risks or impacts on JBS' business; monitoring and implementation of policies, strategies and specific initiatives; and evaluation of investments proposals in sustainability. The Sustainability area also reports to the Socio-Environmental Responsibility Committee the performance of operations in relation to water consumption targets.
Outro, especifique (Independent Member of the Board of Directors of JBS)	The Socio-Environmental Responsibility Committee is also composed by two Independent Member of the Board of Directors of JBS. It is responsible for dealing with and connecting subjects related to sustainability in the company's business, such as: identification, evaluation and treatment of critical issues that results in risks and business impact; monitoring and implementation of policies, strategies and specific actions; and evaluation of proposals for investments in sustainability. The Sustainability area also reports to the Socio-Environmental Responsibility Committee the performance of operations in relation to water consumption targets.

W6.2b

(W6.2b) Dê mais detalhes sobre a supervisão das questões hídricas pelo conselho.

	Frequência com a qual as questões hídricas são incluídas na pauta planejada	Mecanismos de governança nos quais as questões hídricas estão integradas	Explique
Linha 1	Programada - todas as reuniões	Monitoramento da implementação e do desempenho Fornecimento de incentivos para os funcionários Análise e orientação de orçamentos anuais Análise e orientação de planos de negócios Análise e orientação dos principais planos de ação Análise e orientação de políticas de gestão de riscos Análise e orientação de estratégia Análise e orientação da estratégia de responsabilidade corporativa Definição de objetivos de desempenho	The Socio-Environmental Responsibility Committee, by internal regulation, meets ordinarily every three months to assess the Company's sustainability performance as the water performance through the Sustainable Water Management Program (PGSA) program, reported to Committee by the business presidents. The PGSA provides the identification of critical river basins in water stress. This program's goal is to improve water efficiency and reduce the risk of water scarcity, promoting an integrated management. Water aspects are monitored on systematic basis and allows the company to assess its performance and to define actions plans when needed, as to approve new project development, new investment analysis; It is also addressed budgeting, business planning and planning (volumes and production sites), risk management, and other items. The performance in the water use of each unit is evaluated daily by a technical team and the main management of the units, if deviations are identified, action plans are created to improve the indicators. The parameters monitored are also reported in a computerized corporate software (Credit360), which allows management and performance evaluation of the company's global sustainability indicators. The performance data are reported daily to corporate environment managers and operations director, weekly data is presented to the business president.

W6.2d

(W6.2d) A organização tem pelo menos um membro do conselho com competências para questões hídricas?

	O(s) membro(s) do conselho tem(têm) competências para questões hídricas	Critérios utilizados para avaliar as competências do(s) membro(s) do conselho para questões hídricas	Razão principal para que não haja competências no conselho para questões hídricas	Explique por que a organização não tem pelo menos um membro do conselho com competências para questões hídricas, e se há eventuais planos para abordar as competências por parte do conselho no futuro
Linha 1	Sim	One of the board members is recognized by the local authority for the implementation of hydro renewable energies. The hydro energy depends on water availability and demands a continuous risk assessment in order to forecast and mitigate any water stress.	<Not Applicable>	<Not Applicable>

W6.3

(W6.3) Mencione o(s) cargo(s) ou comitê(s) de gerência de nível mais alto com responsabilidade pelas questões hídricas (não inclua os nomes dos indivíduos).

Nome do(s) cargo(s) e/ou comitê(s)
Outro Diretor do C-suite, especifique (Chairman of the directors board)

Responsabilidade
Avaliação de riscos e oportunidades hídricas
Gestão de riscos e oportunidades hídricas

Frequência de reporte das questões hídricas para o conselho
Frequência maior que trimestral

Explique
The chairman of the Socio-Environmental Responsibility Committee is the chairman of the Board of Directors of JBS. The President is responsible for organizing and coordinating the Committee's activities, including, among other duties: (a) propose the schedule of activities for the corresponding year, including the annual calendar of regular meetings; (b) define the agenda, convene, install and chair the Committee's meetings; (c) represent the Committee before any other corporate governance bodies of the Company, signing, when necessary, any correspondence, invitations and reports on behalf of the Committee; (d) report to the Board of Directors the work carried out by the Committee.

Nome do(s) cargo(s) e/ou comitê(s)
Comitê de Sustentabilidade

Responsabilidade
Avaliação das futuras tendências de demanda de água
Avaliação de riscos e oportunidades hídricas
Gestão de riscos e oportunidades hídricas

Frequência de reporte das questões hídricas para o conselho
Trimestralmente

Explique
The Socio-Environmental Responsibility Committee advises the Board of Directors regarding the risks and opportunities in sustainability initiatives. Accordingly, the committee is responsible for dealing and connecting all topics related to the Company's business in a global perspective, including: identification, addressing and treatment of critical issues that result in risks or impacts on JBS' business; monitoring and implementation of policies, strategies and specific initiatives; and evaluation of investments proposals in sustainability.

W6.4

(W6.4) São dados incentivos aos membros do conselho ou do C-suite pela gestão das questões hídricas?

	Dar incentivos pela gestão das questões hídricas	Comentários
Linha 1	Sim	JBS has an annual bonus program for its leadership, which evaluates individual results related to performance goals and behavioral assessment. In the case of environmental professionals, the Directors, Managers and Supervisors have water consumption targets, if they meet the established goal, they are awarded a bonus. The company also recognizes individual or collective efforts to develop new projects that generate process change or behavioral change of employees that manage the reduction in the volume of water abstracted and/or consumed. The recognition is accomplished by means of internal channel disclosure for the whole company, as well as providing specific training and presentation of the initiatives in internal events.

W6.4a

(W6.4a) Quais incentivos são dados a funcionários do C-suite ou a membros do conselho pela gestão de questões hídricas (não inclua os nomes dos indivíduos)?

	Função(ões) com direito a incentivo	Indicador de desempenho	Explique
Recompensa monetária	Outro Diretor do C-suite (Directors)	Redução na captação de água Redução nos volumes de consumo Melhorias na eficiência – operações diretas	JBS has an annual bonus program for its leadership, which evaluates individual results related to performance goals and behavioral assessment. In the case of environmental professionals, Managers and Supervisors have water consumption targets, if they meet the established goal, they are awarded a bonus.
Recompensa não-monetária	Ninguém tem direito a esses incentivos	<Not Applicable>	For Water issues JBS doesn't have non-monetary rewards

W6.5

(W6.5) A empresa está engajada em atividades que possam, direta ou indiretamente, influenciar a política pública na área hídrica por meio de alguma das seguintes formas?

Sim, engajamento direto com os formuladores de políticas públicas
Sim, associações do setor

W6.5a

(W6.5a) Quais processos estão em vigor na organização para garantir que todas as suas atividades diretas e indiretas que buscam influenciar as políticas estejam em consistência com seus compromissos com á água/com políticas relativas à água?

Yes, JBS engage with policy makers and trade association regarding water topics. Considering that water management is extremally affected by local context, the environmental analysts of JBS units join several regional River Basin Committees, in participation with government, private initiative and society. The aim is to understand the watershed challenges to be addressed through management and also influence public policies through the involvement with the political decision makers and ensure alignment between the topics discussed, the politics focus and and water resources policy of the company. To ensure that JBS representatives are aligned with its policies, only water specialists can represent the company in forums and the environmental analyst from the unit participation on the River Basin Committees guarantees commitment with local and corporate strategy, addressing any gap or inconsistency.

JBS has assumed the chair from ABPA Sustainability Chamber, which focuses on discussing strategic issues and ways to improve water management, animal welfare and climate change. It is an opportunity to interact with other actors and address public policies. The results of JBS advocacy and activities in external forums and events are currently reported to the Socio-Environmental Responsibility Committee. If the results or interests are inconsistent with the company's water policy, the Socio-Environmental Responsibility Committee assesses whether the activities are worth it or not.

W6.6

(W6.6) A organização incluiu informações sobre sua resposta aos riscos hídricos em sua declaração financeira tradicional mais recente?
Sim (é possível anexar o relatório – opcional)

W7. Estratégia de negócios

W7.1

(W7.1) As questões hídricas estão integradas a algum aspecto do plano de negócios estratégico de longo prazo? Em caso afirmativo, como?

	As questões hídricas estão integradas?	Horizonte de longo prazo (anos)	Explique
Objetivos comerciais de longo prazo	Sim, as questões hídricas estão integradas	11-15	JBS manages sustainability in line with the Sustainable Development Goals (SDGs) and for water issues, objective 6 "Clean water and sanitation" is considered in new projects and business plans. We recognize that JBS's geographic and production expansion is related to the quality and quantity of water available locally. Drought periods affect the ability of rivers to maintain their quality after the discharge of treated industrial wastewater, droughts also affect animal irrigation, influence the growth of grains, which are used to produce animal feed. In addition, we recognize that drought can affect the availability of electricity, since most of the energy generated in Brazil comes from hydroelectric plants, and periods of drought can increase the price of energy. In this way, JBS 'ability to make progress in production will be made possible by efforts in the administration and management of water resources. JBS Brazil has a strategy to improve the water management, guided by the Sustainable Water Management Program (PGSA), which identifies critical units through internal evaluation (risk of water scarcity and strategic importance of the unit) and external aspects (Water Balance in the hydrographic basin) making it possible to prioritize the allocation of investments and the establishment of goals to reduce risk exposure. JBS also establishes internal goals to reduce water intensity and promote the engagement of the value chain in water resource management practices.
Estratégia para alcançar objetivos de longo prazo	Sim, as questões hídricas estão integradas	11-15	Water management is not just a critical issue for JBS and food industry sustainability, is a basic element of the value chain, essential for animal and vegetable development and for ensuring products and processes meet sanitary standards. In Brazil, JBS has the Sustainable Water Management Program (PGSA), that identifies critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize investment allocation and targets setting to reduce the exposure to shortage risk. Companywide, water stewardship is crucial to our long-term viability. Companywide, our approach to water stewardship is defined at the corporate level, but goals and targets are set by each facility to ensure ownership and accountability. We work closely and collaboratively with federal, state and local municipalities to address complex issues and jointly develop solutions. Finally, every facility invests capital annually to make sure it stays in alignment with and committed to our Environmental Policy while appropriately addressing local challenges. JBS also established a long-term target to reduce water usage intensity. The target base year is 2019 and the global goal that JBS has established was 15% of reduction by 2030 for operations, a 10-year scenario.
Planejamento financeiro	Sim, as questões hídricas estão integradas	5-10	Water is an extremely relevant aspect and included in JBS investment assessments. Companywide, JBS has an annual investment plan for environmental improvements with focus on water use management, treatment of effluents, management of solid residues and atmospheric emissions and greenhouse effect gases (GHG). This plan is developed based on a comprehensive environmental diagnosis made by the Company to identify opportunities for improving the environmental indicators from processing plants in Brazil. The Investment Plan is updated on a yearly basis and has an extensive list of itemized projects. The adhesion to these principles in the Company routine is guided by the Environment Policy, which presents standards and good practices to be applied and discloses environmental monitoring and control points in order to achieve seamlessness of actions and routine among all production plants. The water investment has increased 300% from 2019 to 2020. JBS also has the Sustainable Water Management Program (PGSA), that identifies critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize investment allocation and targets setting to reduce the exposure to shortage risk.

W7.2

(W7.2) Na organização, qual é a tendência das despesas de capital (CAPEX) e das despesas operacionais (OPEX) com relação à água para o ano de reporte, e qual é a tendência prevista para o próximo ano de reporte?

Linha 1

CAPEX relacionados à água (+/- % de variação)
120

Tendência futura prevista para o CAPEX (+/- % de variação)
10

OPEX relativos à água (+/- % de variação)
125

Tendência futura prevista para o OPEX (+/- % de variação)
10

Explique
CAPEX increased by 120% because in 2021 investments were made to modernize and improve efficiency in the treatment of water and effluents, such as structural improvements and the standardization of controls in water treatment plants; implantation of automatic operation control / disinfection equipment; construction of raw water storage reservoirs for periods of drought; projects for reusing cooling water and backwashing the water treatment plant. OPEX was estimated based on environmental management expenses in general and increased by 25% because closed factories were reopened and new factories have been acquired. For the next year, the trend is for investments to increase in CAPEX and OPEX, since JBS intends to reopen closed factories and inaugurate new factories, hiring new employees and increasing the costs of water supply and license renewals (OPEX) and also carrying out more investments to acquire or update fixed assets (CAPEX).

W7.3

(W7.3) A organização usa a análise de cenários para informar sua estratégia de negócios?

	Uso da análise de cenários	Comentários
Linha 1	Sim	The profitability of the company's industrial processes may be materially affected by commodity prices related to animal feed such as grains, corn and soybeans. JBS joins watershed committees meeting in order to monitor the watershed status and monthly tracks the water availability and its impacts on energy production and animal feed, besides projecting future scenarios to determine strategies. The availability and cost of raw material vary according to rainfall distribution; therefore, it is also one of the criteria evaluated by the company. The monitoring process uses local government databases and climate data to formulate a strategic planning of purchase. The analysis is also based on assessment, WRI. In 2020, JBS conducted a climate scenario study and physical risk assessment..The study presents the main elements to support the decision-making process for reducing the company's climate risk.

W7.3a

(W7.3a) Dê detalhes da análise de cenários, quais resultados relacionados à água foram identificados e como eles influenciaram a estratégia de negócios da organização.

	Tipo de análise de cenários utilizado	Parâmetros, suposições, escolhas analíticas	Descrição de possíveis resultados relacionados à água	Influência na estratégia de negócios
Linha 1	Hídricos Climáticos Outro, especifique (Sustainable Water Management Program (PGSA))	The scenario analysis was performed considering that different climatic scenarios would implicate in water scarcity and floods scenarios. 30 years maximum temperature series, maximum rain series and maximum scarcity rain series were added to a model in order to evaluate the implication to the facilities and also to the supply chain on the near and long term (30 years).	Climate change, including the impact of water stress, creates both physical and financial risks. Natural disasters, fires, droughts, changes in rainfall patterns or extreme weather conditions, including floods, extreme cold or heat, hurricanes or other storms, could harm the health or growth of farming and interfere with the Company's operations through a lack of energy, lack of fuel, damage to production and installations or interruption of means of transport, among other things. Any of these factors, as well as disruptions in our information systems, could have an adverse effect on our financial results. Considering the scenarios assessed, there are five main hot spots that are more vulnerable to water stress and that would cause financial loses to the company. The beef and pork production have four facilities on locations identified with high risk regarding occurrence of water stress and floods. The cattle supply chain located in some spots in Brazil was identified with high risk regarding occurrence of water stress.	Due to the increased concern for water scarcity and its relevance in constraining JBS's growth, it established the Sustainable Water Management Program (PGSA) to develop integrated sustainability strategies on Water Management. This program has a Water Committee, comprised by sustainability managers, responsible for their respective operational unit to deal specifically with water issues, enhancing water management. The program identified the critical units by evaluating internal (water shortage risk and water strategic importance) and the external aspects (Water Balance in the river basin) for each unit, making it possible to prioritize actions such as investment allocation and targets setting to reduce the unit's exposure to shortage risk. The study presents the main elements to support the decision-making process for reducing the company's climate risk. The construction of climate scenarios aims to broaden the company's perception of the relationship of its operations to the effects of climate change and water resources.

W7.4

(W7.4) A empresa usa um preço interno sobre a água?

Linha 1

A empresa usa um preço interno sobre a água?
Não, mas no momento estamos estudando práticas de avaliação da água

Explique
We intend to establish water pricing parameters for the coming years.

W7.5

(W7.5) A organização classifica algum dos seus produtos e/ou serviços atuais como de baixo impacto hídrico?

	Produtos e/ou serviços classificados como de baixo impacto hídrico	Definição utilizada para classificar o baixo impacto hídrico	Razão principal para que a organização não classifique nenhum dos seus produtos e/ou serviços atuais como de baixo impacto hídrico	Explique
Linha 1	Sim	Yes. Kind Leather is a leather developed in Brazil in 2019, with a more efficient and innovative production process. Right at the outset of the process, the parts of the hides that would be unusable are removed, as this material can still be channeled to other industries – like pharmaceuticals and food, transforming waste to raw materials and making a significant contribution to the sustainability of the entire value chain. The lower environmental impact of the innovation was proven in a Life Cycle Assessment (LCA) study carried out in 2020, which introduced the brand to the sports footwear market. It also recently received another important recognition: the best industry score in the Higg Materials Sustainability Index (Higg MSI) – a global index that evaluates various materials used in the fashion industry, like cotton, leather, plastic, fabrics, metal and rubber.	<Not Applicable>	The Kind Leather is a revolutionary type of leather, developed by JBS Couros. With a patent filed by the Company, Kind Leather uses a production process that reduces water consumption by 52 L/m2. This means that water intensity is reduced when compared against the ordinary leather production.

W8. Metas

W8.1

(W8.1) Descreva a abordagem usada para estabelecer e monitorar os objetivos e/ou metas hídricos.

	Níveis das metas e/ou dos objetivos	Monitoramento no nível corporativo	Método de estabelecimento e monitoramento de metas e/ou objetivos
Linha 1	Metas e objetivos da empresa como um todo Metas e/ou objetivos específicos no nível dos negócios Metas e/ou objetivos específicos da unidade/instalação Metas e/ou objetivos específicos no nível da marca/produto Metas e/ou objetivos no nível nacional	As metas são monitoradas no nível corporativo Os objetivos são monitorados no nível corporativo	In the context of our company's non-financial targets, we have been assessing water and performance since 2014. Target setting is defined on a context on the continuous improvement in order to reduce the impact on the environment and optimize the use of natural resources, based on identification of opportunities of water use which is monitored by each JBS facility. The target set by the facility is assessed by the corporate management and president of the business unit and then signed off by the CEO from Brazil operations. This legitimize the target companywide and ensures that they are meaningful in terms of our water commitments. To ensure accountability and ownership the targets are monitored by the facilities through the database system Credit360 monthly, and then annually reported to the business president. Any significant variances must be justified and reported with a red flag. These targets are typically related to improving use of water efficiency; thus, we track both total water use and water use intensity to each facility from beef, pork, poultry, JBS leather and JBS new business and each facility. Then business unit is set with a specific reduction target. Our intention is to reduce absolute water use across Brazil business units by 15% by 2030. The company has the public target to reduce 15% the water intensity regarding water consumption by tones of product by 2030 considering 2019 as baseline. The improvement in the ESG Assessments is a Goal to JBS and a premise to the company strategy. Year by year the company follows the ESG evaluations reports and makes a GAP analysis in order to understand the opportunities of improvement internally in JBS management.

W8.1a

(W8.1a) Dê detalhes das metas relacionadas à água monitoradas no nível corporativo e o progresso alcançado.

Número de referência da meta
Meta 1

Categoria da meta
Intensidade hídrica dos produtos

Nível
Na empresa como um todo

Motivação principal
Menor impacto ambiental

Descrição da meta
Water use was identified as a material environmental issue for JBS as it is at the base of the production and supply chain. Reduction target is a key pillar of water security as published in our Corporate Sustainability Strategy for the next 10 years. Our intention is to reduce water intensity (m^3/ton) across all business units by 15% regarding water withdrawals until 2030, taking 2019 average as the base year.
The target was defined considering the company's commitment to reduce the impact in the environment and that being more efficient on the water use means reducing risk, increasing freshwater availability, as an adaptation to a scenario the company will face water scarcity), and commitment to UN Sustainable Development Goals.
The target setting is driven by the identification of opportunities by each facility then assessed by the corporate management and president of the business unit and then discussed and approved in the Socio-Environmental Responsibility Committee.

Métrica quantitativa
Porcentagem de redução por produto

Ano-base
2019

Ano de início
2020

Ano da meta
2030

Porcentagem da meta alcançada
0

Explique
The company invested in eliminating water lose, leakage and improving the water capture and monitoring system on 2021, which increased the total figure regarding the amount of water used and made impossible to capture all the benefits from the efficiency projects implemented. Also, the company grows through acquisitions and has the challenge to address water efficiency use process on the operations recently acquired.

W8.1b

(W8.1b) Dê detalhes sobre o(s) objetivo(s) da organização com relação à água monitorado(s) no nível corporativo e o progresso alcançado.

Objetivo
Redução do impacto ambiental do produto na fase de uso

Nível
Na empresa como um todo

Motivação
Menor impacto ambiental

Descrição do objetivo
The company is committed to the goal of reducing water intensity in 15% until 2030.

Ano-base
2019

Ano de início
2020

Ano de término
2030

Progresso
The company was not able yet to reduce the water consumption intensity. The company invested in eliminating water lose and improving the water capture and monitoring system on 2021, which increased the total figure regarding the amount of water used and made impossible to capture all the benefits from the efficiency projects implemented. Also, the company grows through acquisitions and has the challenge to address water efficiency use process on the operations recently acquired.

Objetivo
Engajamento com os formuladores de políticas públicas para levar adiante uma gestão e políticas sustentáveis para a água

Nível
Na empresa como um todo

Motivação
Governança da água

Descrição do objetivo
JBS goal is to participate in watershed committee. This goal was selected since tracking changes in water availability, water use conflicts, water scarcity risk and changes in its regulatory framework is essential to ensure JBS growth. JBS participation in the watershed committee provides the company with the necessary information and contacts to improve water efficiency and to work together with the local community in projects beyond the company gates.

Also, JBS actively participates in the Water Technical Committee (CT) of CBEDS (Brazilian Business Council for Sustainable Development) and with other companies engage on management efficiency in river basin committees.

Ano-base
2017

Ano de início
2018

Ano de término
2025

Progresso
JBS tracks the progress during watershed committee discussion. JBS intends to expand its participation in watershed Committees for its operations (local governance). This goal concerns the development of the Sustainable Water Management Program (PGSA).

Objetivo
Engajamento com os fornecedores para ajudá-los a melhorar a governança da água

Nível
Outro, especifique (Supply Chain)

Motivação
Boas práticas recomendadas do setor

Descrição do objetivo
JBS goals is to ensure the supply of quality water and to monitor water use. Suppliers must be aware of water importance to their business and start to understand the concept of water efficiency. Protecting supplier's business making them more resilience to water risk ensure JBS supply, shielding its production from water risk.

Ano-base
2017

Ano de início
2018

Ano de término
2025

Progresso
Poultry, pork and cattle suppliers are also monitored in order to guarantee that they monitor water use and also that it is constantly available for those animals and ensure the Animal Welfare. Seara has been supporting the installation of cistern for storing rainwater in the water stressed regions to ensure a regular supply of water.

Objetivo
Promoção de práticas sustentáveis na agricultura

Nível
Outro, especifique (Supplay Chain)

Motivação
Responsabilidade social corporativa

Descrição do objetivo
JBS goal is realize a sustainable management of suppliers in the Amazon, promoting sustainable practices. To keep the Amazon biome contribute to the water balance in all biomes across Brazil.

Ano-base
2017

Ano de início
2018

Ano de término
2025

Progresso
The Company has projects aiming the protection and preservation of the environment, knowing that forestry preservation is one of the aspects that ensure water supply and quality.

Objetivo
Outro, especifique (Employees engagement)

Nível
Na empresa como um todo

Motivação
Governança da água

Descrição do objetivo
JBS goal is promote the environmental education on conscious use of water. To identify opportunities for improvement to reduce water waste and promote a cultural change on water resources management. Beside the water intensity corporate target that is measured along the whole operation, the identification of water efficiency projects is encouraged through campaigns and during the environmental week.

Ano-base
2017

Ano de início
2018

Ano de término

2025

Progresso

One of the projects that JBS Sustainable Water Management Program (PGSA) is the improvement of the engagement of industrial employees. Since 2019, the engagement was strengthened in the internal communication campaigns (leadership and factory employees) for the conscious use of water. The communication plan provides for several actions throughout the year, especially in the dry season.

W9. Verificação

W9.1

(W9.1) A organização verifica alguma outra informação sobre a água reportada no seu reporte para o CDP (ainda não abrangida por W5.1a)?

Sim

W9.1a

(W9.1a) Quais dados da divulgação para o CDP foram verificados, e quais normas foram usadas?

Módulo de reporte	Dados verificados	Norma de verificação	Explique
W1 Estado atual	Water withdrawals: - Total volumes - Volumes by source Water Discharges: - Total volumes - Volumes by destination Water Discharge Quality: - By standard effluent parameters Water Consumption: - Total volume Water recycled/ reused	ISAE 3000	JBS Brazil has its water data third-party audited every year, carried out for stakeholders, to ensure that there are no risks in the investment of projects that include water indicators (water consumption, by source for example) to environmental improvements

W10. Aprovação

W-FI

(W-FI) Use este campo para fornecer informações ou contextos adicionais que possam ser considerados relevantes para a resposta da organização. Observe que este campo é opcional e não é pontuado.

W10.1

(W10.1) Dê detalhes sobre a pessoa que assinou (aprovou) as respostas sobre água para o CDP

	Cargo	Categoria de trabalho correspondente
Linha 1	Chief Sustainability Officer (CSO)	Diretor de Sustentabilidade (CSO)

W10.2

(W10.2) Indique se a organização concorda que o CDP transfira seus dados publicamente divulgados sobre as estratégias de resposta aos impactos e riscos à iniciativa Water Action Hub do CEO Water Mandate [isso se aplica apenas a W2.1a (resposta aos impactos), W4.2 e W4.2a (resposta aos riscos)].

Não

SW. Módulo do programa Supply Chain

SW0.1

(SW0.1) Qual é a receita anual da organização para o período de reporte?

	Receita anual
Linha 1	350695560000

SW1.1

(SW1.1) Alguma das instalações indicadas em W5.1 pode exercer um impacto em um membro solicitante do Programa Supply Chain do CDP?

Sim, os membros do Programa Supply Chain do CDP compram bens e serviços das instalações indicadas em W5.1

SW1.1a

(SW1.1a) Indique quais instalações mencionadas em W5.1 podem causar impactos para um membro solicitante do Programa Supply Chain do CDP.

Número de referência da instalação
Instalação 30

Nome da instalação
Facility 30

Membro solicitante
Wal Mart de Mexico

Descrição do potencial impacto para o membro
Some proportion from the products sold are produced on facilities located on watershed with water stress, which means a risk of price variation or break on production.

Comentários
This is a single facility.

Número de referência da instalação
Instalação 31

Nome da instalação
Facility 31

Membro solicitante
Wal Mart de Mexico

Descrição do potencial impacto para o membro
Some proportion from the products sold are produced on facilities located on watershed with water stress, which means a risk of price variation or break on production.

Comentários
This is a single facility.

Número de referência da instalação
Instalação 32

Nome da instalação
Facility 32

Membro solicitante
Wal Mart de Mexico

Descrição do potencial impacto para o membro
Some proportion from the products sold are produced on facilities located on watershed with water stress, which means a risk of price variation or break on production.

Comentários
This is a single facility.

SW1.2

(SW1.2) É possível fornecer dados de geolocalização das instalações?

	É possível fornecer dados de geolocalização das instalações?	Comentários
Linha 1	Não, estes dados são confidenciais	

SW2.1

(SW2.1) Proponha algum projeto hídrico mutuamente benéfico no qual a organização possa colaborar com membros específicos do Programa Supply Chain do CDP.

Membro solicitante
Johnson & Johnson

Categoria do projeto
Outros

Tipo de projeto
Outro, especifique ((Collaborative measures))

Motivação
The collaborative measures aim to benefit Johnson & Johnson and its suppliers, including JBS.

Prazo estimado para concluir o projeto
4 a 5 anos

Detalhes do projeto
The project could comprise the Johnson & Johnson' suppliers (besides JBS) and other key stakeholders with facilities located in sensitive river basins. The purpose of the project would be to promote and share collaborative actions to reduce the water footprint (through the decreasing of water withdrawal, improvement on water discharge parameters, increase on water reuse and water re circulation indexes) of the companies involved and, consequently, promote the conservation of the river basins and business Sustainability

Resultado projetado
The project could be leaded by Johnson & Johnson together with JBS and other key stakeholders, aiming collaborative measures to promote conservative actions for the most sensitive river basins where the facilities are located. These collaborative measures could focus on the recovery and preservation of natural resources in the river basin, such as forests, as a strategic action to promote the water quality and availability; Increasing the efficiency on water withdrawal and discharge, improving the water footprint of the companies involved in the project, thus contributing to the decrease of Johnson & Johnson indirect water footprint. Increasing the water use efficiency and promoting the improvement of water quality and availability are keys actions to promote the business sustainability.

Membro solicitante
Wal Mart de Mexico

Categoria do projeto
Outros

Tipo de projeto
Outro, especifique (Collaborative measures)

Motivação
The collaborative measures aim to benefit Wal Mart de Mexico and its suppliers, including JBS.

Prazo estimado para concluir o projeto
4 a 5 anos

Detalhes do projeto
The project could comprise the Wal Mart de Mexico suppliers (besides JBS) and other key stakeholders with facilities located in sensitive river basins. The purpose of the project would be to promote and share collaborative actions to reduce the water footprint (through the decreasing of water withdrawal, improvement on water discharge parameters, increase on water reuse and water re circulation indexes) of the companies involved and, consequently, promote the conservation of the river basins and business Sustainability.

Resultado projetado
The project could be leaded by Wal Mart de Mexico together with JBS and other key stakeholders, aiming collaborative measures to promote conservative actions for the most sensitive river basins where the facilities are located. These collaborative measures could focus on the recovery and preservation of natural resources in the river basin, such as forests, as a strategic action to promote the water quality and availability; Increasing the efficiency on water withdrawal and discharge, improving the water footprint of the companies involved in the project, thus contributing to the decrease of Wal Mart de Mexico indirect water footprint. Increasing the water use efficiency and promoting the improvement of water quality and availability are keys actions to promote the business sustainability.

SW2.2

(SW2.2) Algum projeto hídrico já foi implantado devido ao engajamento com um membro do Programa Supply Chain do CDP?
Não

SW3.1

(SW3.1) Dê eventuais valores de intensidade hídrica disponíveis para os produtos ou serviços da organização.

Nome do produto
hygiene and cleanliness

Valor da intensidade hídrica
3.88

Numerador: Aspecto hídrico
Captação de água

Denominador
tons of products

Comentários
The water intensity value supplied to Johnson and Johnson was quantified by summing the water withdrawal amount and dividing this value by the sum of the facilities' production in tons. It was considered all products produced and water withdrawal by the unit in cubic meters.

Nome do produto
animal protein

Valor da intensidade hídrica
5.76

Numerador: Aspecto hídrico
Captação de água

Denominador
tons of products

Comentários
The water intensity value supplied to Wal Mart de Mexico was quantified by summing the water withdrawal amount and dividing this value by the sum of the facilities' production in tons. It was considered all products produced and water withdrawal by the unit in cubic meters.

Enviar sua resposta

A resposta está sendo enviada em qual idioma?
Inglês

Confirme como a resposta deve ser gerenciada pelo CDP

	Compreendo que minha resposta será compartilhada com todas as partes interessadas solicitantes	Permissão da resposta
Selecione suas opções de envio	Sim	Não público

Confirme abaixo
Li e aceito os Termos aplicáveis