

## F0. Introduction

---

### F0.1

---

#### **(F0.1) Give a general description of and introduction to your organization.**

JBS S.A. is the world's second largest food Company and a global leader in several of its businesses. JBS SA is a food Company with 65 years of tradition and global leader in animal protein processing.

The Company has a diverse brand and product portfolio with options ranging from fresh and frozen meat to added value, ready-to-eat, prepared and processed products. In 2018, the company's businesses were divided into the following units: JBS South America (Seara, Friboi, JBS Leather, JBS New Business) and JBS USA (JBS USA Beef., which includes the operations in the US, Canada, Australia and New Zealand, JBS USA Pork and Pilgrim's Pride Corporation: with Pilgrim's operations in the US, Puerto Rico, México and Europe).

It sells these products under brands well-known for their excellence and innovation, and which are leaders in their respective markets, including Friboi, Seara, Swift, Primo, Pilgrim's Pride, Moy Park, Just Bare, and others. The structure involves processing units of cattle, pigs, sheep, poultry, leather, and confinement of cattle and sheep.

JBS has production units and commercial offices in over 20 countries throughout the world (Brazil, United States, Australia, Canada, Ireland, France, UK, Italy, Argentina, Uruguay, Mexico, etc.), operating in the segments of beef, pork, lamb and chicken, production and marketing of leather, pet products, hygiene and cleanliness, cans, collagen, biodiesel, transportation and vegetables.

The Company also focuses on the highest possible food safety and quality standards and has adopted best sustainability practices throughout its value chain, operating a global and diverse food production and distribution platform, with production units and commercial offices in over 20 countries and over 230,000 team members - from factories to sales offices. We serve over 275,000 customers in more than 190 countries, managing a customer portfolio that includes various types of retailers, from major regional chains to small-scale retailers, as well as wholesale clubs and food service companies (restaurants, hotels, food service distributors and supplementary processing companies).

The Company's commitment to innovation also reflects its management approach to related businesses such as leather, biodiesel, collagen, personal hygiene and cleaning products, natural casings, solid waste management solutions, metal packaging and transportation, as well as the sustainability practices adopted throughout the value chain. One example is the constant cattle supplier monitoring using satellite imagery, georeferenced maps of supplier farms and official data from government agencies. The purpose is to identify and block the supplying farms that presents any non-compliance with the socio-environmental criteria of JBS.

Also incorporated into its business management is the pursuit for modernization, quality of products and raw materials, 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.

With an annual net revenue of BRL 181.7 billion, equivalent to US\$50 billion, JBS is positioned as the largest animal protein Company in the world, with a strong presence in the most competitive production regions on earth.

More information can be found in the official JBS site (<https://jbs.com.br/en/>) and in the JBS 2018 Annual and Sustainability Report (<https://jbs.infoinvest.com.br/enu/4980/RAS%202018%20-%20Inglis%20VF.pdf>).

### F0.2

---

**(F0.2) State the start and end date of the year for which you are reporting data.**

	Start Date	End Date
Reporting year	January 1 2018	December 31 2018

**F0.3**

**(F0.3) Select the currency used for all financial information disclosed throughout your response.**

BRL

**F0.4**

**(F0.4) Select the stage(s) of the value chain which best represents your organization's area of operation pertaining to forest risk commodities.**

	Stage of the value chain
Timber	Processing
Palm Oil	Processing
Cattle Products	Processing
Soy	Processing
Other - Rubber	Not applicable
Other	Not applicable

**F0.5**

**(F0.5) Do you produce, use, or sell materials or products that contain any of the forest risk commodities?**

	Produce/use/sell	Disclosing	Explanation if produce/use/sell but not disclosing
Timber	Yes	Yes	<Not Applicable>
Palm Oil	Yes	No	The company has a few business units that produce hygiene and cleaning products with Palm Oil imported from Malaysia and Indonesia and its suppliers are part of Round Table of Sustainable Palm Oil – RSPO, which has developed a set of environmental and social criteria, which companies must comply with in order to produce Certified Sustainable Palm Oil (CSPO). When they are properly applied, these criteria can help to minimize the negative impact of palm oil cultivation on the environment and communities in palm oil-producing regions. It means that RSPO members have committed just to produce, source and/or use sustainable palm oil certified by the RSPO. This raw material is used in the soap basic dough, which is made from vegetable oils and animal fat. However, the purchased volume of palm oil is not representative within the company's operations. Additionally, in partnership with Espaço ECO Foundation (BASF), JBS completed a life cycle analysis study palm oil-based soaps. The study analysed the environmental, social and economic performance of soap of animal and vegetal origin. As a result, the study allowed JBS to make an inventory of processes, to know the main environmental and social impacts of the productive chain and to identify opportunities for improvement, with a focus on continuous improvement. Palm Oil is also used in the food industry, in the frying process of prefabricated foods and industrialized products. In this case, 100% of Palm Oil is produced in Brazil, following sustainable production certification standards.
Cattle Products	Yes	Yes	<Not Applicable>
Soy	Yes	Yes	<Not Applicable>
Other - Rubber	No	<Not Applicable>	<Not Applicable>
Other	No	<Not Applicable>	<Not Applicable>

**F0.6**

**(F0.6) Are there any parts of your direct operations not included in your disclosure?**

Yes

**F0.6a**

**(F0.6a) Identify the parts of your direct operations not included in your disclosure.**

Exclusion	Description of exclusion	Potential for forests-related risk	Please explain
Source/ country/ geographical area	Operations that are not located in Brazil are not part of this disclosure due to lower deforestation risks associated to commodities.	No potential	The company's approach to prevent the use of commodities from deforested areas has a focus on Brazilian operations, which offer a higher level of risk in this issue. The country's agricultural frontier expansion to the north leads to a pressure on areas of the Amazon ecosystem to become economically exploited. In other countries where JBS have large businesses, cattle breeding is predominantly in an intensive handling culture (confinement) or the type of biome prevailing is different from forest. Even so, aiming to identifying and mitigating any risk associated with deforestation, JBS has been increasingly improving the mapping approach of its international operations.

**F0.7**

**(F0.7) Are there any parts of your supply chain not included in your disclosure?**

Yes

**F0.7a**

**(F0.7a) Identify the parts of your supply chain not included in your disclosure.**

Exclusion	Description of exclusion	Potential for forests-related risk	Please explain
Specific supplier(s)	Indirect suppliers of livestock in the supply chain	Potential for forests-related risk, evaluated, but not disclosing to CDP	The efforts of data collection, supplier information and analysis of the socio-environmental monitoring system are limited-partly-to direct cattle suppliers. The company does not have access to Animal Transit Forms (GTA) for its indirect suppliers - the forms are only available to and used by the government. The government alone is responsible for controlling animal transportation in Brazil. Importantly, JBS supports improving access to public animal traceability information in Brazil, which would increase transparency across the meat production chain. It remains open to dialog with government agencies, organized civil society and other industry agents to keep this issue moving ahead. With regard to its responsibility, JBS works with a sophisticated monitoring system for direct cattle suppliers, which uses satellite imagery of the properties and analysis of public documents. Irregular vendors are immediately blocked. In the last three independent audits, JBS obtained more than 99.9% compliance with socio-environmental criteria applied to the purchase of cattle.
Specific supplier(s)	Palm Oil Suppliers Chain	Potential for forests-related risk, evaluated, but not disclosing to CDP	The company has a few business units that produce hygiene and cleaning products with Palm Oil imported from Malaysia and Indonesia and its suppliers are part of Round Table of Sustainable Palm Oil – RSPO, which has developed a set of environmental and social criteria, which companies must comply with in order to produce Certified Sustainable Palm Oil (CSPO). When they are properly applied, these criteria can help to minimize the negative impact of palm oil cultivation on the environment and communities in palm oil-producing regions. It means that RSPO members have committed just to produce, source and/or use sustainable palm oil certified by the RSPO. This raw material is used in the soap basic dough, which is made from vegetable oils and animal fat. However, the purchased volume of palm oil is not representative within the company's operations. Additionally, in partnership with Espaço ECO Foundation (BASF), JBS completed a life cycle analysis study palm oil-based soaps. The study analysed the environmental, social and economic performance of soap of animal and vegetal origin. As a result, the study allowed JBS to make an inventory of processes, to know the main environmental and social impacts of the productive chain and to identify opportunities for improvement, with a focus on continuous improvement. Palm Oil is also used in the food industry, in the frying process of prefabricated foods and industrialized products. In this case, 100% of Palm Oil is produced in Brazil, following sustainable production certification standards.

## F1. Current state

---

### F1.1

---

#### (F1.1) How does your organization produce, use, or sell your disclosed commodity(ies)?

##### Forest risk commodity

Timber

##### Activity

Using as input into product manufacturing

##### Form of commodity

Hardwood logs

Paper

Boards, plywood, engineered wood

Secondary packaging

Wood-based bioenergy

##### Source

Contracted suppliers (processors)

Contracted suppliers (manufacturers)

##### Country/Region of origin

Brazil

##### % of procurement spend

1-5%

##### Comment

Consumption of representative forest products-biomass for boiler fuel and production of cardboard for packaging products for distribution - in Brazilian operations that may be associated with the risk of deforestation. The % of acquisition expenditure refers to net revenues obtained by JBS Brasil and Seara. When considering the volume of forest products acquired by Brazilian operations (with risk of deforestation of native forests), in relation to the company's overall revenues, the index is 1-5%.

---

##### Forest risk commodity

Cattle products

##### Activity

Slaughtering

##### Form of commodity

Cattle

Tallow

Beef

By-products (e.g. glycerin, gelatin)

Hides/leather

##### Source

Smallholders

Multiple contracted producers

Trader/broker/commodity market

##### Country/Region of origin

Brazil

##### % of procurement spend

81-90%

##### Comment

Cattle is the main raw material of Brazilian operations (Friboi). The % of acquisition expenditure refers to net revenues obtained by JBS Brasil. When considering the volume of cattle acquired by Brazilian operations (with risk of deforestation of native forests), in relation to the company's overall revenues, the index is 11-20%.

---

**Forest risk commodity**

Soy

**Activity**

Other, please specify (Feeding pork and chicken (animal diet))

**Form of commodity**

Whole soy beans

Soy bean meal

Other, please specify (Deactivated Soy)

**Source**

Trader/broker/commodity market

Contracted suppliers (processors)

Contracted suppliers (manufacturers)

**Country/Region of origin**

Brazil

**% of procurement spend**

21-30%

**Comment**

Seara uses soy to manufacture animal feed, which is used in farms of poultry and pork (company's own farms or on integrated farms). The % of acquisition expenditure refers to net revenues obtained by Seara. When considering the volume of cattle acquired by Brazilian operations (with risk of deforestation of native forests), in relation to the company's overall revenues, the index is 1-5%.

---

F1.1a

---

**(F1.1a) Indicate from which State/region(s) and municipality(ies) your disclosed commodity(ies) originate.**

**Forest risk commodity**

Timber

**Country/Region of origin**

Brazil

**State/Region**

Specify state/region (North, Northeast, Midwest, South, Southeast)

**Municipality**

Specify municipality (1) (The most representative part comes from the Southeast and Center-West regions.)

**Please explain**

---

**Forest risk commodity**

Cattle Products

**Country/Region of origin**

Brazil

**State/Region**

Specify state/region (The most representative states in the origination of raw material (cattle) of JBS, in Brazil, are: Mato Grosso, Mato Grosso do Sul, Rondônia and Goiás.)

**Municipality**

Specify municipality (1) (The most representative municipalities/states in cattle slaughter volume of JBS in Brazil are: - Araputanga, Mato Grosso - Barra do Garças, Mato Grosso - Confresa, Mato Grosso - Diamantino, Mato Grosso - Pontes e Lacerda, Mato - Grosso )

Specify municipality (2) (The most representative municipalities/states in cattle slaughter volume of JBS in Brazil are: - Campo Grande, Mato Grosso do Sul - Naviraí, Mato Grosso do Sul )

Specify municipality (3) (The most representative municipalities/states in cattle slaughter volume of JBS in Brazil are: - São Miguel do Guaporé, Rondônia - Vilhena, Rondônia )

Specify municipality (4) (The most representative municipalities/states in cattle slaughter volume of JBS in Brazil are: - Mozarlândia, Goiás )

**Please explain**

Currently, the company acquires most of the cattle used in its livestock farming activities located within a radius of up to 300 kilometers of its slaughter facilities in Brazil. The Company is able to maintain a reduced cost with the transport of cattle, since it is one of the main producing centers. In addition, there is a difference between the production facilities and the risk reduction of animals during the transport of animals. JBS has created to reward animal welfare animals, following as premises of animal welfare.

---

**Forest risk commodity**

Soy

**Country/Region of origin**

Brazil

**State/Region**

Specify state/region (Midwest, South and Southeast)

**Municipality**

Specify municipality (1) (The most representative part comes from the South, Southeast and Midwest regions)

**Please explain**

---

**F1.2**

---

**(F1.2) Indicate the percentage of your organization’s revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year.**

	<b>% of revenue dependent on commodity</b>	<b>Comment</b>
Timber	21-30%	This range of percentage considers only JBS operations that are dependent of timber from areas with potential deforestation risk - in relation to JBS's global revenue.
Palm Oil	<Not Applicable>	<Not Applicable>
Cattle products	11-20%	This range of percentage considers only JBS operations that are dependent of cattle from areas with potential deforestation risk - in relation to JBS's global revenue.
Soy	6-10%	This range of percentage considers only JBS operations that are dependent of soy from areas with potential deforestation risk - in relation to JBS's global revenue.
Other - Rubber	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>

**F1.3**

**(F1.3) Do you own or manage land used for the production of your disclosed commodity(ies)?**

**Forest risk commodity**

Timber

**Own and/or manage land?**

Owned and managed land

**Type of control**

Operational

**Description of type of control**

Own areas with planted forests. JBS has areas of planted forests – 1,013 hectares - managed in accordance with good farming practices, to biomass conversion and supply its industrial boilers. Moreover, periodic verifications are performed in planted areas and environmental protected areas (APP – Permanent Preservation Areas and Legal Reserves).

**Country/Region**

Brazil

**Land type**

Planted

**Size (Hectares)**

1013

**Do you have a system in place to monitor forests-related risks?**

Yes

**Type of monitoring system**

<Not Applicable>

**Description of monitoring system**

<Not Applicable>

**Recent infraction(s)**

No

**Explanation of infraction**

<Not Applicable>

**Forest risk commodity**

Cattle Products

**Own and/or manage land?**

Owned and managed land

**Type of control**

Operational

**Description of type of control**

In Brazil, the company operates four own livestock confinement units which was created so that small and medium-sized ranchers who do not have their own confinement structure have the option to use JBS's structure and improve indicators such as stocking rate and faster inventory turnover. The cattle remains in JBS confinement units for approximately 100 days until they are sent to JBS production operations. All suppliers which send animals to JBS Confinements, are evaluated according to the JBS Responsible Purchase Policy, that establishes socio-environmental criteria for the selection of livestock suppliers. The Company does not acquire livestock from farms involved in deforestation of native forests, invasion of indigenous lands or areas of environmental conservation, or that are seized by the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). JBS does not purchase cattle from suppliers involved in rural violence, agrarian conflicts, slave or child labor

**Country/Region**

Brazil

**Land type**

Other, please specify (feedlot-fattened beef cattle )

**Size (Hectares)**

320

**Do you have a system in place to monitor forests-related risks?**

Yes

**Type of monitoring system**

<Not Applicable>

**Description of monitoring system**

<Not Applicable>

**Recent infraction(s)**

No

**Explanation of infraction**

<Not Applicable>

---

**Forest risk commodity**

Soy

**Own and/or manage land?**

Don't own or manage land

**Type of control**

<Not Applicable>

**Description of type of control**

<Not Applicable>

**Country/Region**

<Not Applicable>

**Land type**

<Not Applicable>

**Size (Hectares)**

<Not Applicable>

**Do you have a system in place to monitor forests-related risks?**

<Not Applicable>

**Type of monitoring system**

<Not Applicable>

**Description of monitoring system**

<Not Applicable>

**Recent infraction(s)**

<Not Applicable>

---

## Explanation of infraction

<Not Applicable>

---

### F1.4

---

**(F1.4) For your disclosed commodity(ies), indicate if you collect data regarding your own compliance and/or the compliance of your suppliers with the Brazilian Forest Code.**

#### Timber

##### **Do you collect data regarding compliance with the Brazilian Forest Code?**

Yes, from both suppliers and owned/managed land

##### **Please explain**

The company has a Normative Instruction of Biomass Purchasing stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with JBS – 100% of the JBS timber suppliers are in comply with environmental standards. Moreover, before conducting the registration of biomass supplier, an environmental and social analysis must be performed based on IBAMA (Brazilian Environment and Natural Resources Institute) and MTE (Ministry of Labor) public dirty lists that show respectively, legal persons and entities with embargoed areas due to illegal deforestation/inappropriate land use and that are involved in slave labor. All environmental management of the biomass purchasing process is a responsibility of the environmental department of each operational unit. This includes management of the requirements Native Forest Consumer Registration and Forest Origin Document or other specific state requirement. JBS is one of the largest consumers of paper/cardboard in Brazil, as it uses the material to produce the packaging for its products. 100% of the paper/cardboard acquired has FSC certification, which is part of the selection criteria for suppliers of this material. In 2018, the company restructured its Compliance department. The area now has a Global Director, responsible for the implementation and supervision of initiatives in all regions of JBS. To that end, a new organizational structure was defined with the hiring of more resources to ensure that business practices ensure ethics and good conduct for all, as well as compliance with all internal laws, policies and procedures. One of the pillars of action is Due Diligence. In October 2017, JBS began to improve the practices of third party reputational assessment (Due Diligence). Once performed manually for a few risk segments, the Company hired expert advice on the subject to automate the process as much as possible, with the expectation of increasing the volume of analysis. Currently, the segments mapped with relevant risks are analyzed, including any third party that needs a proxy to act on behalf of JBS. The Due Diligence process was included in the third-party registration process. Thus, at the time of registration, third parties listed as being at risk are automatically evaluated by software, being released or disapproved, and by means of a data protection system.

#### Cattle products

##### **Do you collect data regarding compliance with the Brazilian Forest Code?**

Yes, from both suppliers and owned/managed land

##### **Please explain**

According to JBS responsible purchase criteria, cattle suppliers included on the dirty lists published by the Ministry of Labor and IBAMA, and those whose land overlaps deforested areas, indigenous land or protected areas will be suspended by the company procurement system until they have remedied this situation. JBS Standards of cattle purchasing are expressed in the document “Minimum Criteria for Industrial – Scale Operations with Cattle and Beef Products in the Amazon Biome”, which states that the company must not acquire cattle from areas with illegal deforestation, cleared in the Amazon Biome and located within protected areas. To make sure that suppliers are complying with these standards, there is a System for Social and Environmental Monitoring of Cattle Suppliers that works on geospatial analysis. To ensure compliance with the JBS’s commitments, an independent party annually audits the System. According to the results of the independent audit since 2014, compliance levels were above 99%. In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it began audits of cattle acquisitions of Amazonian suppliers in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL. Along the supply chain, JBS supports projects which promotes sustainable practices to increase the productivity of farms in the Amazon region in order to develop a new operating model that preserves natural resources and that brings financial benefits to the ranchers in the region. JBS has been contributing to the development of differentiated bonus protocols (certain animal quality characteristics), the opening of markets for products with social and environmental attributes, as well as support for training, earnings disclosure and fundraising for ongoing efforts. In October 2017, JBS began to improve the practices of third party reputational assessment (Due Diligence). The Company hired expert advice on the subject to automate the process as much as possible. The Due Diligence procedure was integrated into the third-party registration process. Thus, at the time of registration, the third parties listed in risk categories will be automatically evaluated by a software, being released or disapproved if negative reputational aspects are identified.

## Soy

### Do you collect data regarding compliance with the Brazilian Forest Code?

Yes, from suppliers

#### Please explain

The company only purchases soy from suppliers that signed the Soy Moratorium. Thus, 100% of JBS soy suppliers, in Brazil, are in compliance with Soy Moratorium criteria. In 2017, the company restructured its Compliance department. The area now has a Global Director, responsible for the implementation and supervision of initiatives in all regions of JBS. To that end, a new organizational structure was defined with the hiring of more resources to ensure that business practices ensure ethics and good conduct for all, as well as compliance with all internal laws, policies and procedures. One of the pillars of action is Due Diligence. In October 2017, JBS began to improve the practices of third party reputational assessment (Due Diligence). Once performed manually for a few risk segments, the Company hired expert advice on the subject to automate the process as much as possible, with the expectation of increasing the volume of analysis. Currently, the segments mapped with relevant risks are analyzed, including any third party that needs a proxy to act on behalf of JBS. The Due Diligence procedure was integrated into the third-party registration process. Thus, at the time of registration, the third parties listed in risk categories will be automatically evaluated by a software, being released or disapproved if negative reputational aspects are identified.

## F1.5

### (F1.5) Does your organization collect production and/or consumption data for your disclosed commodity(ies)?

	Data availability/Disclosure
Timber	Consumption data available, disclosing
Palm Oil	<Not Applicable>
Cattle products	Consumption data available, disclosing
Soy	Consumption data available, disclosing
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

## F1.6

### (F1.6) Have you identified sufficient sources of sustainable materials to meet your current operational needs? If yes, what are you doing to ensure the security/continuity of this supply?

## Timber

### Sustainable source identified

Yes

### Primary action to ensure supply

<Not Applicable>

### Please explain

Seara has developed its own planted forest for internal supply to ensure the sustainable origin of its materials. Currently, JBS has developed initiatives aiming to generate energy by reusing waste from industrial process as alternative fuels, what decreases the commodity risks for the company. For instance: As a waste generated from the pig slaughter industrial process, the pig hair is extracted from the pig skin - approximately 400 tons per year, which had previously been sent to landfills – is reused to generate thermal and steam-based energy; and Reusing the bovine rumen content (25kg generated for each animal processed) is possible to generate thermal and steam-based energy. This change reduces the consumption of biomass and fossil fuels for the boilers and reduces GHG emissions. Additionally, JBS' R&D area developed an improvement project to change the design of some of the packaging, which became a single piece, instead of two - the bottom and top of the box, thereby reducing the use of cardboard raw materials used in the process by 41%. JBS is one of the largest consumers of paper/cardboard in Brazil, as it uses the material to produce the packaging for its products. Although, 100% of the paper/cardboard acquired has FSC certification, which is part of the selection criteria for suppliers of this material. JBS has implemented a recovery project of wooden pallets used for transportation. Before this project, pallets were used only once and disposed after cargo transport. Through the reverse logistic practice, currently is possible to reuse the same pallets on average for 4 times. In 2017 and 2018 JBS invited cardboard package suppliers to participate and answer the CDP Supply Chain Forest questionnaire, which was developed exclusively by the CDP so that the companies to evaluate and stimulate their suppliers, considers the policies, strategies, opportunities managements and risks related to actions to combat deforestation in the production of agricultural commodities.

## Cattle products

### Sustainable source identified

Yes

### Primary action to ensure supply

<Not Applicable>

### Please explain

JBS supported a project which aims to increase productivity of farms in the Amazon region and fosters the adoption of more sustainable techniques through cultures rotation, pasture reform and integrated agriculture, livestock and forestry, contributing for deforestation reduction. As a result, there were 72 farmers engaged by the program, which had a complete diagnosis. Production indicators are used to measure program affectivity. JBS developed a monitoring system, which is comprised of 2 analysis procedures. The first involves geospatial monitoring and the second performs the intersection of the registration data of the suppliers with the data from the public lists of areas embargoed by IBAMA. JBS also launches the Conexão Gestão program in order to improve the managerial skills of medium-sized cattle ranchers. In partnership with the Instituto Integra, the pilot project aims to support the rancher in the day-to- day management of the farm, helping to increase the efficiency of the beef production chain. It aims to discover new leaders of Brazilian livestock and help increase the productive efficiency of the participating farms. It is a project to change traditional concepts in the farms, giving them the knowledge of management methodologies that raise the gains, generating more income for the cattle ranchers. Of a large selection, only 10 farmers (owners of 17 properties) were chosen for periodic meetings, debates and discussions. The evolution of the group has already been perceived. In 2018, JBS and the Sustainable Livestock Working Group (GTPS) brought together technicians from the Company's field team, cattle purchasing staff and 30 partner producers who are part of the Social Fuel Stamp Program for a training on the Guide Sustainable Livestock Indicators (GIPS). Bovine tallow, a meat processing co-product, is the second most important source of biodiesel feedstock in Brazil, JBS Biodiesel produces biofuel from bovine tallow - animal slaughter residue. The idea of the initiative is that the better the management, the more efficient the production, helping the farmer not only to produce more, but to produce better and in a more profitable way.

## Soy

### Sustainable source identified

Yes

### Primary action to ensure supply

<Not Applicable>

### Please explain

100% of soy purchases comes from Soy Moratorium Signatories suppliers. The soy Moratorium gives security that the raw material supplied came from a legal source, thus minimizing the risk of supply failure by illegal suppliers. In 2017 and 2018, JBS invited soybean suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, developed by the CDP exclusively so that the companies to evaluate and stimulate their suppliers, considers the policies, strategies, opportunities management and risks related to actions to combat deforestation in the production of agricultural commodities.

## F1.7

---

### (F1.7) Has your organization experienced any detrimental forests-related impacts?

Yes

## F1.7a

---

### (F1.7a) Describe the forests-related detrimental impacts experienced by your organization, your response, and the total financial impact.

#### Forest risk commodity

Timber

#### Impact driver type

Physical

#### Primary impact driver

<Not Applicable>

#### Primary impact

Constraint to growth

#### Description of impact

Longer periods without rains can also affect the operation due to the lack of biomass or higher purchase costs, as well as excessive rains and floods can impact on the transportation of essential raw material.

#### Primary response

Implementation of environmental best practices in direct operations

#### Total financial impact

515000000

#### Description of response

JBS develops projects, which aims to reuse industrial waste as alternative fuel, for example reusing the bovine rumen content (25kg generated for each animal processed) is possible to generate thermal and steam-based energy. JBS Seara also reuse poultry fat to generate heat energy to partially replace fuel like timber. This change reduces the consumption of biomass and fossil fuels for the boilers and reduces GHG emissions. The estimated financial impact refers to the total impact in a year, calculated based on the net revenue obtained and the average drought time, which will impact the planted forests. It is important to note that the figures refer to the total operations of JBS in Brazil, where there is the risk of the forest commodity be associated with reported drought situations may occur only in certain regions of the country - thus the actual impact will probably be less than calculated.

---

#### Forest risk commodity

Timber

#### Impact driver type

Regulatory

---

**Primary impact driver**

<Not Applicable>

**Primary impact**

Increased operating costs

**Description of impact**

JBS has established environmental and social criteria – slave labor and deforestation - for biomass purchase (used as boiler fuel). If there are not local suppliers following these criteria, the purchase will have to be made from more distant suppliers, resulting in higher transportation costs.

**Primary response**

Greater compliance with regulatory requirements

**Total financial impact****Description of response**

JBS informs and guides its suppliers regarding its social and environmental criteria and tries to diversify its supply chain. To mitigate the risk of purchasing timber from suppliers involved in deforestation, JBS established a Normative Instruction of Biomass Purchasing, stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with the company.

**Forest risk commodity**

Cattle products

**Impact driver type**

Physical

**Primary impact driver**

<Not Applicable>

**Primary impact**

Increased operating costs

**Description of impact**

Long scarce rain periods can also affect the operation because of the lack of raw material or higher purchase costs, as well as excessive rains and floods can affect the transportation of essential raw material. Higher costs of raw material may affect the entire cattle production chain, creating an indirect impact in the expansion of operations and in some cases may even result in the closure of units.

**Primary response**

Engagement with suppliers

**Total financial impact**

1215000000

**Description of response**

Diversification of suppliers, due to lower supply of cattle, and availability of confined animals. Production planning can be changed to units located in less favorable regions to water stress. JBS has been working with a chain of suppliers to enable producers to improve production through production management, called Connection Program. The initiative provides livestock breeders with commercial Training. Through a platform, the program intend to build a stronger relationship between the producer and the value chain by providing information on meat processing, marketing and sales. The estimated financial impact per year, refers to the potential purchase of raw material (livestock) from farms blocked by any socio-environmental criteria, socio-environmental restrictions limit the purchase of animals.

**Forest risk commodity**

Cattle products

**Impact driver type**

Regulatory

**Primary impact driver**

<Not Applicable>

**Primary impact**

Increased operating costs

**Description of impact**

JBS has made a public commitment to not purchase cattle from ranches responsible for deforestation in the Amazon Biome region, as well as those that use labor analogous to slavery or trespass indigenous lands or environmental protected areas delimitation. The public agreement that establishes criteria for cattle purchases from properties located in the Amazon Biome region is also known by Zero Deforestation Commitment and its requirements are under the document "Minimum criteria for industrial scale operations with cattle and beef products in the Amazon". Additionally, the lack of environmental compliance of the cattle suppliers can go against the JBS social and environmental commitment and other agreements made by the company, for instance: One resource to establish traceability by JBS is the Amazon TAC (Conduct Adjustment Term), which was signed in 2009 and renovated in 2013. This new agreement standardizes the obligations to be met by all JBS refrigeration units in the Amazon region, renewing the commitment of one of the largest processors of animal protein in the world in requiring their suppliers to comply with legal and socio-environmental criteria as a prerequisite for the purchase of animals for slaughtering.

#### Primary response

Implementation of environmental best practices in direct operations

#### Total financial impact

1215000000

#### Description of response

Greater engagement with customers are made to meet specific demands, for example demand for sustainable beef, which cause the new product development process and market expansion. JBS informs and guides its suppliers regarding its social and environmental criteria, such as, not purchasing raw material from deforested lands or suppliers involved in slave labor. In this sense, the monitoring provided by Social and Environmental Monitoring System through geo-referenced maps is mandatory for all farms located in the Amazon Biome Region. Additionally, JBS has implemented an internal audit system in 100% of cattle purchases. Every year the Environmental Monitoring System is verified by independent audit. The New Field Program (Programa Novo Campo), which promotes more sustainable production techniques at husbandry farms in the Amazon region, thus contributing to the development of differentiated bonus protocols, to the opening of markets for products with social and environmental attributes, as well as to support training, earnings disclosure and fundraising for ongoing efforts. The estimated financial impact per year, refers to the potential purchase of raw material (livestock) from farms blocked by any socio-environmental criteria, socio-environmental restrictions limit the purchase of animals.

---

#### Forest risk commodity

Cattle products

#### Impact driver type

Reputational and markets

#### Primary impact driver

<Not Applicable>

#### Primary impact

Brand damage

#### Description of impact

The Non-Governmental Organization Greenpeace has been studying the behaviour of the production chain for cattle raising in the Amazon region since 2007. In 2009, after a long investigation, the organization published its report "Slaughtering the Amazon", which highlighted the relationship between the processing companies and their cattle suppliers involved with forest clearance and slave labor, and the products offered for sale in the market. JBS was one of the processing companies that were on the list. In fact, it brought negative impacts to JBS' image as well as with its customers.

#### Primary response

Implementation of environmental best practices in direct operations

#### Total financial impact

0

#### Description of response

JBS has made a public commitment to not purchase cattle from ranches responsible for deforestation in the Amazon Biome region and those that use labor analogous to slavery or trespass indigenous lands or environmental protected areas. In 2010, JBS developed a social and environmental monitoring system to remain in compliance with the commitment, According to the results of the independent audit, JBS achieved results greater than 99%. In 2018, reached 100% of socio-environmental compliance (data audited by independent firm DNV GL) . As a significant result of its public commitment, JBS was mentioned in a study prepared for Greenpeace as one of the three biggest Brazilian frigorific company which has been complying with the public commitment, reporting independent audit results regarding its purchase monitoring system and how its actions has been changing the market in a positive way. Another study published in the scientific journal Conservation Letters in 2015, by Professor Holly Gibbs of the University of Wisconsin, shows that the JBS's Commitment has been helping to reduce deforestation and this has occurred by market pressure, which has adopted stricter criteria for purchase. Through a case study based on JBS, it was demonstrated that

the company's requirements were determinant for producers to seek environmental regularization through the CAR- driving a positive impact on the chain of livestock suppliers.

---

**Forest risk commodity**

Soy

**Impact driver type**

Physical

**Primary impact driver**

<Not Applicable>

**Primary impact**

Increased operating costs

**Description of impact**

Longer periods without rains also can affect the operation because of the lack of soy or higher purchase costs, as well as excessive rains and floods can affect the transportation of essential raw material. Higher costs of soy may affect the entire poultry and pork production chain, creating an indirect impact in the expansion of operations and in some cases may even result in the closure of units.

**Primary response**

Supplier diversification

**Total financial impact**

200000000

**Description of response**

Seara constantly monitors meteorological maps, reports of crops changes, supply and global demand images/graphics, prices, curves and economic scenarios, identifying, monitoring and creating strategies to mitigate risks that company are exposed and reduce its possible effects on JBS operations. The Grain Purchasing Directory is responsible for this monitoring process and for developing the medium and long term strategic planning of commodities acquisition. Commodity markets are characterized by high volatility due to external factors such as climate, supply, transport costs, agricultural policies, storage costs, among others. The Risk Control Board is responsible for mapping the Company's commodity price exposures and proposing to the Risk Management Committee strategies to mitigate such exposures. The estimated financial impact per year, refers to the total impact calculated based on the net revenue obtained and the average drought time, which will impact the planted forests. It is important to note that the figures refer to the total operations of JBS in Brazil, where there is the risk of the forest commodity be associated, and that any reported drought situations may occur only in certain regions of the country - thus the actual impact will probably be less than calculated.

---

**Forest risk commodity**

Soy

**Impact driver type**

Regulatory

**Primary impact driver**

<Not Applicable>

**Primary impact**

Increased operating costs

**Description of impact**

Despite of the fact that in 2016 the soy moratorium was renovated for undetermined period, in 2015 it was renovated just for one year, creating a risk exposure scenario for JBS.

**Primary response**

Amendment of existing forests-related commitments

**Total financial impact**

0

**Description of response**

The end of Soy Moratorium could represent significant risks to the company once would be not possible to guarantee free deforestation of soy purchase.

---

## F2. Procedures

---

### F2.1

---

#### **(F2.1) Does your organization undertake a forests-related risk assessment?**

Yes, forests-related risks are assessed

### F2.1a

---

#### **(F2.1a) Select the options that best describe your procedures for identifying and assessing forests-related risks.**

##### **Timber**

##### **Value chain stage**

Supply chain

##### **Coverage**

Full

##### **Risk assessment procedure**

Assessed in an environmental risk assessment

##### **Frequency of assessment**

Six-monthly or more frequently

##### **How far into the future are risks considered?**

1 to 3 years

##### **Tools and methods used to identify and assess risks**

Internal company methods

FSC Global Forest Registry

##### **Please explain**

The verification of the supplier's compliance to the company's environmental and social criteria occurs in every purchase process. JBS requires its cardboard packaging suppliers to present the FSC certificates. Besides, JBS established a partnership with the Brazilian NGO Instituto Centro de Vida (ICV) on the New Field Program (Programa Novo Campo). The program promotes more sustainable production techniques at husbandry farms in the Amazon region to enhance productivity. It fosters the diversification of income sources through cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main issue in the Amazon region, as it indirectly reduces the need for more deforestation. With this production model adoption, there is the possibility to purchase wood derivatives from more sustainable producers.

## **Cattle Products**

### **Value chain stage**

Supply chain

### **Coverage**

Full

### **Risk assessment procedure**

Assessed as part of an established enterprise risk management framework

### **Frequency of assessment**

Six-monthly or more frequently

### **How far into the future are risks considered?**

1 to 3 years

### **Tools and methods used to identify and assess risks**

Internal company methods

External consultants

Other, please specify (Public information (IBAMA, MTE and INPE))

### **Please explain**

JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. JBS has made a public social commitment to not purchase cattle from farms responsible for deforestation in the Amazon Biome region. To ensure compliance with this commitment, in 2010 JBS developed a social and environmental monitoring system for farms that supply livestock to JBS. The suppliers, which aren't in comply with the criteria, are automatically blocked in the Enterprise Resource Planning System (ERP) and no purchasing operations are made. According to the results of the independent audit of a JBS achieved results greater than 99%. In 2018, JBS reached 100% of socio-environmental compliance, which it's the best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers annually in 2014. The Sustainability Committee meets quarterly and is responsible for the management of risks and critical issues, as well as business opportunities for the company that can generate a high negative or positive impact on JBS' operations over the short, medium and long terms. The committee's job includes implementation of policies, strategies and specific actions, and evaluation of sustainability investment proposals. The Committee monitors results of the Monitoring System including indicators of the total active suppliers on the system's registration, percentage of suppliers from the Legal Amazon, how many already have the digital map, number of eligible and blocked suppliers. In case of acquisition opportunities or opening new plants in Amazon Biome area, JBS performs an analysis of the potential suppliers of raw materials regarding their environmental compliance. This analysis allows JBS to evaluate the feasibility of operating in a specific region.

## Soy

### Value chain stage

Supply chain

### Coverage

Full

### Risk assessment procedure

Assessed as part of an established enterprise risk management framework

### Frequency of assessment

Six-monthly or more frequently

### How far into the future are risks considered?

1 to 3 years

### Tools and methods used to identify and assess risks

Internal company methods

External consultants

Other, please specify (Soy Moratorium)

### Please explain

The verification of the supplier's compliance in relation to the company's environmental and social criteria occurs in every purchase process. Seara has the Grains and Agricultural Feedstock Purchasing Directory that follows on climate issues that directly affect the cost of soybeans and consequently the cost of production. This Directory constantly monitors meteorological maps, reports of crops changes, supply and global demand images/graphics, prices, curves and economic scenarios, identifying, monitoring and creating strategies to mitigate the risks to which company is exposed to and reduce its possible effects on JBS operations. When soybean has a profitable price, it's made the option of buying large quantities for storage and later use. The Grains and Agricultural Feedstock Purchasing Directory is responsible for this monitoring process and for developing the medium and long term strategic planning of the commodities purchasing. Seara's business is exposed to volatility in grain prices, the variation of which results from factors outside the control of management, such as climatic factors, supply volumes, transportation costs, agricultural and other policies. Seara, in accordance with its inventory management policy, initiated its grain price risk management strategy, which includes physical consumption control, which includes expectations of future consumption, anticipated purchases, allied to operations in the future market, through the contracting of hedge futures on B3, CME and OTC, through NDFs (Non-Deliverable Forwards), in order to guarantee the market price.

## F2.1b

---

**(F2.1b) Which of the following issues are considered in your organization's forests-related risk assessment(s)?**

## Availability of forest risk commodities

### Relevance & inclusion

Relevant, always included

### Please explain

The criteria "Availability and quality of forest risk commodities" is important to JBS business because if there is not enough raw material (cattle) in compliance with the company's environmental criteria near the slaughterhouse, there will be an increase in operational costs. To manage the risk of cattle purchase from suppliers involved in native forests deforestation, protected areas invasion or child and compulsory labor use, JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. JBS established restrictive procurement procedures performed by a social and environmental monitoring system, composed of two mechanisms of analysis, which work in an integrated manner. The first verifies the existence of the farm or livestock supplier in the lists published by the Ministry of Labor and Employment (MTE) – Registry of Employers Fined for Compulsory Labor and the list of areas embargoed due to illegal deforestation published by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA). The second mechanism of analysis uses a geographic information system (GIS) for the geo-spatial monitoring of farms supplying the company with livestock located in the Legal Amazon region, in order to identify suppliers involved in the deforestation of native forests, the invasion of indigenous lands or environmental conservation units. It is constantly performed a monitoring of the circle radius of cattle purchasing for each plant. To make a deal feasible, the supplier farm should be at the maximum of 200 km far away from the slaughterhouse. Moving the plant for lower deforestation risk areas is also very costly. Additionally, 100% of soy purchased by JBS comes from Soy Moratorium Signatories suppliers. The soy Moratorium gives security that the raw material supplied came from a legal source, thus minimizing the risk of supply failure by illegal suppliers. In 2017 and 2018, JBS invited soybean suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, developed by the CDP exclusively so that the companies to evaluate and stimulate their suppliers, considers the policies, strategies, opportunities management and risks related to actions to combat deforestation in the production of agricultural commodities.

## Quality of forest risk commodities

### Relevance & inclusion

Relevant, always included

### Please explain

"Quality of risk commodities" is important to JBS business once if there is not enough raw material in compliance with the company's environmental criteria near the slaughterhouse, operational costs will increase. Thus, JBS has several initiatives to develop and encourage a more sustainable chain of suppliers 1)New Field Program, which promotes more sustainable production techniques at husbandry farms in the Amazon region, 2)Legal Supplier Program which aims to advise JBS's cattle supply chain in Brazil on how to suit legislation changes in Brazil. JBS's communications channels, mainly the Giro do Boi Show at the Rural channel, were used to guide farmers on how to regularize their operations and implement the CAR.; 3)Green Light Pact, which aims to classify 100% of carcass originated from Mato Grosso do Sul region, one of the most important production centers in Brazil (goal achieved by JBS in January 2016); 4)JBS Connexion Program is a direct communication platform with JBS suppliers in Brazil, focused in commercial education. It aims to approach cattle breeder to supply chain through information regarding beef industrialization, market and sales. It is directed to sixty thousands JBS's cattle suppliers in Brazil; 5) Cattle Breeder Portal, whereby the breeders have free access to the complete cattle slaughter of each one of their farms, the standard photographic classes finishing with academic validation of associations and experts to the classification of carcasses is transparent and auditable; 7) In 2018, JBS and the Sustainable Livestock Working Group (GTPS) brought together technicians from the Company's field team, cattle procurement collaborators and 30 partner producers who are part of the Social Fuel Stamp Program for training on the Sustainable Livestock Indicators Guide (GIPS). Bovine tallow, a meat processing co-product, is the second most important source of biodiesel feedstock in Brazil, JBS Biodiesel produces biofuel from bovine tallow - animal slaughter residue. The main idea of the initiative is that the better the management, the more efficient the production, helping the farmer not only to produce more, but to produce better and in a more profitable way. Participants worked on themes such as regional development, sustainability, guidance for continuous improvement and GIPS operation.

## Impact of activity on the status of ecosystems and habitats

### Relevance & inclusion

Relevant, always included

### Please explain

The JBS Sustainability strategy seeks to have a responsible production chain, including the impacts of activities on the ecosystems and habitats of the regions it operates. JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. JBS is committed to ensure the responsible origin of all the raw materials used in its processes, through the establishment of social and environmental criteria applied to all of its suppliers. In order to guarantee the provenance of all of the products that it offers, JBS has a close relationship with its suppliers to monitor and guide all the stages prior to the arrival of the animals at the Company's processing facilities. In addition, for the beef operation, JBS has a technological system for the social and environmental monitoring of farms to ensure that none of its suppliers is involved in the deforestation of native forests, the invasion of protected areas, such as indigenous lands or protected areas, or with the use of slave labor. Through the adoption of social and environmental criteria for raw material procurement process, JBS has a strong influence in the supply chain by creating a culture of intolerance to deforestation. As a positive result of these actions, JBS mitigates and prevents the impacts that could occur in habitats and ecosystems due its activities. Another study published in the scientific journal Conservation Letters in 2015, signed by Professor Holly Gibbs of the University of Wisconsin, shows that the Commitment has been helping to reduce deforestation and that this has occurred thanks to market pressure, which has adopted stricter criteria for purchase. Gibbs' analysis shows that the pledge has been helping to reduce deforestation and making forest destruction a bad business. Through a case study based on JBS, it was demonstrated that the company's requirements were determinant for producers to seek environmental regularization through the Rural Environmental Registry - driving a positive impact on the chain of livestock suppliers.

## Regulation

### Relevance & inclusion

Relevant, always included

### Please explain

"Regulation" is important to JBS once the Company's operations are increasingly subjected to strict laws and regulations relating to environmental protection. The inability to meet these requirements could result in serious consequences to JBS, including criminal, civil and administrative penalties. As environmental laws become stricter in the markets in which JBS operates, the future costs required to maintain compliance with regulations may adversely affect the availability of funds for capital expenditures and even lower profits. For example, in 2009, JBS signed a Term of Adjustment of Conduct ("TAC") with the Federal Public Prosecutor's Office in the State of Pará, in order to curb the purchase of livestock from listed farms by the Ministry of Labor and Employment , such as having compulsory labor and appearing on the list of embargoed areas, published by the Brazilian Institute for the Environment and Renewable Natural Resources. It also presented an independent audit to verify the Term of Adjustment of Conduct (TAC of the Livestock) of the State of Pará, JBS was recognized among the companies that obtained "positive and satisfactory" result against the commitments signed with the Federal Public Ministry. In 2013, JBS signed a new TAC with the Federal Public Prosecution Office (MPF) in Acre and Mato Grosso to set standards for the facilities located in the Legal Amazon. In independent audits presented by JBS to the Federal Prosecutor's Office, the company obtained excellent results. In 2018 JBS achieved 100% of compliance in terms of socio-environmental criteria of its Responsible Purchase Policy. According to the Brazilian Forestry Code, the country's federal legislation, all rural properties must obtain the Rural Environmental Registry (CAR) by the end of 2019. The CAR is an electronic cadaster that will enable JBS to gain access to more accurate geographic information from its suppliers of raw materials (livestock). However, it may expose JBS to the risk of lower purchasing power and significant increases in logistics costs if a substantial portion of suppliers fail to meet the deadline set by the CAR. In the update, 100% of the suppliers of JBS, who provided animals as of January 1, 2019, presented the registration receipt in the CAR and there was no significant impact of blockades of registrations of farms without CAR.

## Climate change

### Relevance & inclusion

Relevant, always included

### Please explain

Deforestation of native forests, associated with climate change, can change agricultural conditions unpredictably. A significant change in weather patterns could affect the supply of raw material as well as the ability of the supply chain to raise animals. JBS supports a program that aims to increase productivity of husbandry farms creating a higher number of animals per area, reducing pressure over the forests, avoiding deforestation in the Amazon region and adopting more sustainable techniques through cultures rotation, pasture reform and integrated agriculture, livestock and forestry. As consequence, it contributes to the main issue in the Amazon region, indirectly reducing deforestation. The program also aims to collaborate with the commitments of the Brazilian government, which has undertaken to adopt measures to reduce the emission of greenhouse gases through a Nationally Determined Contribution (NDC), which has as one of the objectives to expand the combat actions to deforestation. As a result, in 2015 there were 32 farmers and 40 farms engaged by the program, which have a complete diagnosis and project; 20 farms are implementing the project and 20 farms are in the beginning phase. The follow numbers represent the results of 6 pilot farms in the 1st year after GAP implementation. Results refer to the whole farm, where one 32 hectare module of intensification was installed, representing 5-10% of the pastures: - Reduction of CH<sub>4</sub> emissions (from 353 to 180 gCH<sub>4</sub>/KgLW); - Reduction of slaughtering age (from 44 to 34 for males and from 34 to 24 months for females); - Increase in stocking density (from 1.22 to 1.61 animal units/ha); - Increase in productivity (from 70 to 160 KgCW/ha/yr. Additionally, to ensure security and continuity of supply, JBS has made a public and social commitment to not purchase cattle from ranches responsible for deforestation in the Amazon Biome region as well as those that use labor analogous to slavery or that trespasses limits of indigenous lands or environmental conservation areas. The social and environmental monitoring system of JBS's supply farms contributes to the reduction of the company's carbon footprint and to the national emissions scenario - marked by deforestation caused by the opening of new areas for livestock, since it monitors and blocks properties that have deforestation of native forests.

## Impact on water security

### Relevance & inclusion

Relevant, always included

### Please explain

Commodity prices (timber, cattle and soy) can be varied according to climate change. Long scarce rain periods can also affect the operation because of the lack of raw material or higher purchase costs, as well as excessive rains and floods can affect the transportation of essential raw material. Higher costs of raw material may affect the entire commodities production chain, creating an indirect impact in the expansion of operations and in some cases may even result in the closure of units, production paralysis and even loss of production.

## Tariffs or price increases

### Relevance & inclusion

Relevant, always included

### Please explain

Commodity prices (timber, cattle and soy) can be varied according to climate change. Long scarce rain periods can also affect the operation because of the lack of raw material or higher purchase costs, as well as excessive rains and floods can affect the transportation of essential raw material. Higher costs of raw material may affect the entire commodities production chain, creating an indirect impact in the expansion of operations and in some cases may even result in the closure of units, production paralysis and even loss of production.

## Loss of markets

### Relevance & inclusion

Relevant, always included

### Please explain

JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor. The company implemented a social and environmental monitoring system, composed of two mechanisms of analysis to monitor cattle suppliers and guarantee none purchases in disagreement with the criteria. A system failure that could provoke a non-compliant purchase would have a damaging effect on the company's brand reflected in loss of revenue due to contracts termination and markets recession.

## Brand damage related to forest risk commodities

### Relevance & inclusion

Relevant, always included

### Please explain

The criteria "Brand damage related to forest risk commodities" is important to JBS once the company is exposed to reputational risks due to a potential system failure that could provoke a non-compliant purchase. As a global leader of beef production, JBS is on the spotlight of NGO's protests and media coverage and any collapse of its social and environmental monitoring system would represent a large damage with other effects such as revenue and profits decrease, loss of markets and termination of contracts. JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor. The company implemented a social and environmental monitoring system, composed of two mechanisms of analysis to monitor cattle suppliers and guarantee none purchases in disagreement with the criteria. Importantly, JBS supports improving access to public animal traceability information in Brazil, which would increase transparency across the meat production chain. It remains open to dialog with government agencies, organized civil society and other industry agents to keep this issue moving ahead.

## Corruption

### Relevance & inclusion

Relevant, always included

### Please explain

JBS has an Ethics and Conduct Manual, which provides specific chapters regarding anti-corruption practices and relationships with government bodies. Additionally, JBS also has an internal policy - Normative Instruction that provides specific instructions to purchase raw material (cattle) from JBS employs in order to mitigate conflict of interest risks. In 2017, Cia restructured its Compliance department. The area now has a Global Director, responsible for the implementation and supervision of initiatives in the area in all regions of JBS. To that end, a new organizational structure was defined with the hiring of more resources to ensure that business practices ensure ethics and good conduct for all, as well as compliance with all internal laws, policies and procedures. JBS signed the Corporate Pact for Integrity and Against Corruption, a voluntary and public commitment made by public and private companies with the goal of spreading good business practices and promoting a more ethical and healthy market. Developed by the Ethos Institute, the initiative's mission is to mobilize, sensitize and help companies to manage their businesses in a socially responsible way. The signatory companies undertake to disclose Brazilian anti-corruption legislation to its employees and stakeholders, as well as to comply fully with other laws related to its activities. In this sense, JBS has been carrying out a series of actions, including training and wide dissemination of policies, such as Product Donation Policy, Sponsorship Policy, a new Global Code of Conduct, a Code of Conduct for Business Partners, with the aim of fostering a culture of conformity. In early 2018, the NGO Transparency International released the study "Transparency in Corporate Reports", which evaluated the level of corporate transparency of the 100 largest companies in Brazil. In the survey, JBS obtained a "good / good" concept, reaching a score of 8.1, well above the general average (5.7). Among the 53 largest Brazilian companies with operations abroad, the first being placed in the food sector.

## Social impacts

### Relevance & inclusion

Relevant, always included

### Please explain

Due to the size and scope of its operations, JBS has an important role in generating direct and indirect jobs in many localities. By contributing to the development of these regions, their activities end up having a very high social impact. In addition, the Company seeks to contribute to society by supporting initiatives aimed at the education and training of children and youth, the professionalization of youth and adults, and the training and social inclusion of people with special needs. JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. The Company does not acquire animals from farms involved with deforestation of native forests, invasion of indigenous lands or environmental conservation areas, or that are embargoed by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA). It also will not work with suppliers involved in rural violence or land conflicts, or who utilize slave or child labor. If any supplier is on the Slave List, according to the Ministry of Labor, all your associated farms will be blocked in the JBS purchasing system. Additionally, since 2007, JBS is a signatory to the National Pact for the Eradication of Slave Labor in Brazil (InPACTO), which aims to strengthen the actions against slave labor in Brazil.

## Other, please specify

### Relevance & inclusion

Relevant, always included

### Please explain

After developing procurement procedures to prevent deforestation, the company is also exposed to the lack of enough raw materials in compliance with the requirements it has set. To mitigate the risk of acquiring raw materials from suppliers involved in the deforestation of native forests, the invasion of protect areas, such indigenous land or environmental conservation units and the use of child or compulsory labor, JBS has adopted a responsible sourcing policy and established social and environmental criteria for purchasing commodities that could be from deforestation risk areas. – Establishment of social and environmental criteria - responsible sourcing policy.

## F2.1c

---

### (F2.1c) Which of the following stakeholders are considered in your organization's forests-related risk assessments?

#### Customers

### Relevance & inclusion

Relevant, always included

### Please explain

Greater engagement with customers are made to meet specific demands, for example demand for sustainable beef, which cause the new product development process and market expansion. JBS informs and guides its suppliers regarding its social and environmental criteria, such as, not purchasing raw material from deforested lands or suppliers involved in slave labour. In this sense, the monitoring provided by Social and Environmental Monitoring System through geo-referenced maps is mandatory for all farms located in the Amazon Biome Region. Additionally, JBS has implemented an internal audit system in 100% of cattle purchases. Every year the Environmental Monitoring System is verified by independent audit. Through its official website ([www.jbs.com.br](http://www.jbs.com.br)), JBS provides the most relevant information on strategic sustainability issues (including the supply chain - guarantee of origin), the annual audit reports of the ' Public Commitment to Livestock. " Specific meetings are held with strategic clients to present the Livestock Farms Socio-Environmental Monitoring System. The JBS Ombudsman department began in 2010 and sets up the communication channel available to all employees, customers, suppliers or anyone with a relationship with the JBS group in order to share their complaints, suggestions or praises. Its main objective is to welcome demonstrations and seek definitive solutions, guiding decisions, promoting continuous improvement of work processes, acting with transparency, respect, consistency, reliability, ethics and, above all, secrecy. Since 2015, the Company has implemented its Ombudsman system, automating the entire process of registering complaints and their respective indicators. Annually, a wide publicity campaign for the Ombudsman's Office is carried out in all units through the internal communication channels, as well as banners and information boards distributed by the JBS plants informing the Ombudsman's contacts. This information is also disclosed on the intranet and published on the Company's website. In addition, all new employees participate in face-to-face training at the time of their integration, during which they receive more detailed information about the Ombudsman channel. The contacts with the Ombudsman can be made through the email [ouvidoria@jbs.com.br](mailto:ouvidoria@jbs.com.br), telephone 0800-770-4100 or [www.ouvidoria.jbs.com.br](http://www.ouvidoria.jbs.com.br).

## Employees

### Relevance & inclusion

Relevant, always included

### Please explain

JBS employees are an important part of the company's stakeholders. In this way, there is a constant internal communication work dedicated to the leaders and other employees, containing information on the JBS Responsible Purchase Policy, as well as communication campaigns. The theme is also addressed in the integration of new employees, as well as being widely disseminated in the annual conventions of the various JBS departments. For raw material purchasing teams, which are directly affected by vendor blocking / release, periodic training and documents describing the rules and procedures against the company's socio-environmental criteria are carried out. Through internal communication campaigns, the most relevant information on strategic sustainability issues (including the supply chain - guarantee of origin) is disseminated, as well as the annual audits of the Public Commitment on Livestock. Trust, for JBS, is what guides all relationships with its audiences., the Corporate Compliance Board was created in 2015. Reporting directly to the Institutional Relations Board, the new structure serves all JBS Group businesses and is responsible for identifying, evaluating and monitoring risks. It is also incumbent on it to develop training and communication initiatives for all employees and suppliers. The JBS Ombudsman began in 2010 and sets up the communication channel made available to all employees, customers, suppliers or anyone with a relationship with the JBS group in order to share their complaints, suggestions or praises. Its main objective is to welcome demonstrations and seek definitive solutions, guiding decisions, promoting continuous improvement of work processes, acting with transparency, respect, consistency, reliability, ethics and, above all, secrecy. Since 2015, the Company has implemented its Ombudsman system, automating the entire process of registering complaints and their respective indicators. Annually, a wide publicity campaign for the Ombudsman's Office is carried out in all units through the internal communication channels, as well as banners and information boards distributed by the JBS plants informing the Ombudsman's contacts. All new employees participate in face-to-face training at the time of their integration, during which they receive more detailed information about the Ombudsman channel.

## Investors

### Relevance & inclusion

Relevant, always included

### Please explain

Communication to the market about socio-environmental criteria for the purchase and encouragement of the use of good agricultural practices. JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. It carries out monitoring of the farms of suppliers located in the States of the Legal Amazon by means of a geospatial system capable of identifying occurrences of nonconformities and preventing the purchase of raw materials from suppliers that act in an irregular manner. Throughout the year, JBS also answers several questionnaires sent by investors with questions about actions to combat deforestation. The "CDP Forests" program, also run by the CDP, helps companies and investors to understand and mitigate exposure to the risk of deforestation associated with the use of agricultural commodities, such as soybeans and cattle. JBS reports related actions and strategies to CDP Forests on an annual basis.

## Local communities

### Relevance & inclusion

Relevant, always included

### Please explain

JBS's stakeholder relationships make an important contribution towards business sustainability. One of the company's principles is to build trust with the many markets it interacts with on a day-to-day basis. JBS is aware of the social role it plays in each of these markets and has taken steps to support social, economic and environmental development. The company is also open to dialogue and always respects local cultures. Along the supply chain, JBS supports projects that promote sustainable practices to increase the productivity of farms in the Amazon region in order to develop a new operating model that preserves natural resources and that brings financial benefits to the ranchers in the region. JBS has been contributing to the development of differentiated bonus protocols, the opening of markets for products with social and environmental attributes, as well as support for training, earnings disclosure and fundraising for ongoing efforts. JBS used its communications channels, mainly the Giro do Boi Show at the Rural channel, to guide farmers on how to regularize their operations and implement the CAR. In 2017, the communication through the Giro do Boi Show (TV Rural channel) was intensified. The JBS Ombudsman began in 2010 and sets up the communication channel made available to all employees, customers, suppliers or anyone with a relationship with the JBS group in order to share their complaints, suggestions or praises. Its main objective is to welcome demonstrations and seek definitive solutions, guiding decisions, promoting continuous improvement of work processes, acting with transparency, respect, consistency, reliability, ethics and, above all, secrecy. Since 2015, the Company has implemented its online Ombudsman system, automating the entire process of registering complaints and their respective indicators. Annually, a wide publicity campaign for the Ombudsman's Office is carried out in all units through the internal communication channels, as well as banners and information boards distributed by the JBS plants informing the Ombudsman's contacts. This information is also disclosed on the intranet and published on the Company's website. In addition, all new employees participate in face-to-face training at the time of their integration, during which they receive more detailed information about the Ombudsman channel.

## NGOs

### Relevance & inclusion

Relevant, always included

### Please explain

JBS is involved with a number of major local and global forums that discuss a range of sustainability issues with organized civil society and other members of the value chain. The company maintains constant dialogue with NGOs, such as CDP, to discuss the constant challenges and opportunities related to actions to combat deforestation in the supply chain. JBS also participates in the Working Group for the Control of Deforestation in the Chain Livestock Production, created by the Ministry of the Environment and composed of government agencies, a beef cattle and retail business, as well as NGOs and other stakeholders. These are activities of the Working Group for the Control of Deforestation in the Chain Livestock Productivity: I - to identify the initiatives of the government and of other sectors on the cattle activity and the initiatives to promote sustainability and to monitor the production chain; II - propose actions aimed at promoting sustainability and controlling the origin in the chain production of livestock; III - to contribute to the implementation of the Plan of Action for the Prevention and Deforestation in the Amazon (PPCDAm) and the Plan of Action for the Prevention and Control of Deforestation and Burning in the Cerrado (PPCerrado); IV - contribute to the construction of sectoral animal husbandry agreements, aiming at the illegal deforestation; and V - to develop solutions for the control of the origin of cattle and to verify the rural properties.

## Other forest risk commodity users/producers at a local level

### Relevance & inclusion

Relevant, always included

### Please explain

JBS launches the Conexão Gestão program in order to improve the managerial skills of medium-sized cattle ranchers. In partnership with the Instituto Inttegra, the pilot project aims to support the rancher in the day-to-day management of the farm, helping to increase the efficiency of the beef production chain. It aims to discover new leaders of Brazilian livestock and help increase the productive efficiency of the participating farms. It is a project to change traditional concepts in the farms, giving them the knowledge of management methodologies that raise the gains, generating more income for the cattle ranchers. Of a large selection, only 10 farmers (owners of 17 properties) were chosen for periodic meetings, debates and discussions. And in these chosen farms, controls of machinery, resources and finances were applied. The evolution of the group has already been perceived. In the first moment of evaluation, the note that the members received was 2,5. Eight months after the program was implemented on farms, this grade rose to 8 points, that is, shared learning guaranteed the evolution of managers and financial gains. In 2017 and 2018, JBS invited cattle suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, developed by the CDP exclusively so that the companies to evaluate and stimulate their suppliers, considers the policies, strategies, opportunities management and risks related to actions to combat deforestation in the production of agricultural commodities.

## Regulators

### Relevance & inclusion

Relevant, always included

### Please explain

In order to improve its controls, seeking access to information and discussions with different regulatory agents, JBS participated in several meetings with the Federal Public Prosecutor, especially in the State of Pará, presented and suggesting technical rules to have a supply chain free of deforestation. An example of this was the performance of an independent audit to verify compliance with the State of Pará's Behavior Adjustment Code (TAC), JBS was recognized among the companies that obtained a "positive and satisfactory" result from the commitments entered into with the Federal Public Ministry. JBS also participates in the Working Group for the Control of Deforestation in the Chain Livestock Production, created by the Ministry of the Environment and composed of government agencies, a beef cattle and retail business, as well as NGOs and other stakeholders. These are activities of the Working Group for the Control of Deforestation in the Chain Livestock Productivity: I - to identify the initiatives of the government and of other sectors on the cattle activity and the initiatives to promote sustainability and to monitor the production chain; II - propose actions aimed at promoting sustainability and controlling the origin in the chain production of livestock; III - to contribute to the implementation of the Plan of Action for the Prevention and Deforestation in the Amazon (PPCDAm) and the Plan of Action for the Prevention and Control of Deforestation and Burning in the Cerrado (PPCerrado); IV - contribute to the construction of sectoral animal husbandry agreements, aiming at the illegal deforestation; and V - to develop solutions for the control of the origin of cattle and to verify the rural properties.

## Suppliers

### Relevance & inclusion

Relevant, always included

### Please explain

JBS launches the Conexão Gestão program in order to improve the managerial skills of medium-sized cattle ranchers. In partnership with the Instituto Inttegra, the pilot project aims to support the rancher in the day-to-day management of the farm, helping to increase the efficiency of the beef production chain. It aims to discover new leaders of Brazilian livestock and help increase the productive efficiency of the participating farms. It is a project to change traditional concepts in the farms, giving them the knowledge of management methodologies that raise the gains, generating more income for the cattle ranchers. Of a large selection, only 10 farmers (owners of 17 properties) were chosen for periodic meetings, debates and discussions. And in these chosen farms, controls of machinery, resources and finances were applied. The evolution of the group has already been perceived. In the first moment of evaluation, the note that the members received was 2,5. Eight months after the program was implemented on farms, this grade rose to 8 points, that is, shared learning guaranteed the evolution of managers and financial gains. In 2018, JBS and the Sustainable Livestock Working Group (GTPS) brought together technicians from the Company's field team, cattle purchasing staff and 30 partner producers who are part of the Social Fuel Stamp Program for a training on the Guide Sustainable Livestock Indicators (GIPS). Bovine tallow, a meat processing co-product, is the second most important source of biodiesel feedstock in Brazil, JBS Biodiesel produces biofuel from bovine tallow - animal slaughter residue. The main idea of the initiative is that the better the management, the more efficient the production, helping the farmer not only to produce more, but to produce better and in a more profitable way. Participants worked on themes such as regional development, sustainability, guidance for continuous improvement and GIPS operation. In 2017 and 2018, JBS invited cattle suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, developed by the CDP exclusively so that the companies to evaluate and stimulate their suppliers, considers the policies, strategies, opportunities management and risks related to actions to combat deforestation in the production of agricultural commodities.

### Other stakeholders, please specify

### Relevance & inclusion

Relevant, always included

### Please explain

Top management executives and Sustainability Committee: JBS has five multidisciplinary non-statutory committees working with the company's management in order to support the Board of Directors and make the company's processes more robust. One of these committees is the Sustainability Committee, responsible for dealing with and connecting all topics related to the company's business in a global perspective. This role include the identification, addressing and treatment of critical issues that result in risks or business impact; monitoring and implementation of policies, strategies and specific initiatives; and evaluation of proposals of investments in sustainability. Among the responsibilities of the Sustainability Committee, there is the monitoring of the results of the procurement system.

## F3. Risks and opportunities

---

### F3.1

---

**(F3.1) Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?**

	Risk identified?
Timber	Yes
Palm Oil	<Not Applicable>
Cattle Products	Yes
Soy	Yes
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

### F3.1a

---

---

**(F3.1a) How does your organization define substantive impact on your business?**

Climate change, including the impact of global warming, creates both physical and financial risks in direct operations and in the supply chain. Physical risks of climate change include rising sea levels and changes in climatic conditions, such as increased precipitation changes and extreme weather events. Climate change can have a material adverse effect on the Company's operating results, financial situation and liquidity. Natural disasters, fires, bioterrorism, pandemics, 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 livestock or interfere with the Company's operations through 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. The adoption of good sustainability practices by JBS's raw material suppliers has a direct impact on the quality of its products. In this context, JBS seeks to act as a vector of transformation and innovation in the productive chains in which it participates, supporting and guiding its suppliers on the quality of the inputs produced and reducing the environmental impacts of their respective activities. JBS owns about 60% of the refrigeration units, and consequently the company's supply chain (more than 60% of the livestock supplier chain), located in the Legal Amazon region. In this way, the impact of an increase in Amazon deforestation rates can bring risks to the company by restricting the supply chain.

**F3.2**

---

**(F3.2) Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

	Have you identified opportunities?
Timber	Yes
Palm Oil	<Not Applicable>
Cattle products	Yes
Soy	Yes
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

**F4. Governance**

---

**F4.1**

---

**(F4.1) Does your organization have a policy that includes forests-related issues?**

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

**F4.1a**

---

**(F4.1a) Select the options to describe the scope and content of your policy.**

Row	Scope	Content	Please explain
1	Selected facilities, businesses or geographies only	Commitment to eliminate deforestation and/or conversion Commitment to protect rights and livelihoods of local communities Commitment to transparency Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy List of timebound commitments and targets	After developing procurement procedures to prevent deforestation, the company is also exposed to the lack of enough raw materials in compliance with the requirements it has set. To mitigate the risk of acquiring raw materials from supplier involved in the deforestation of native forests, the invasion of protect areas, such indigenous land or environmental conservation units and the use of child or compulsory labor, JBS Brazil has adopted a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. The Company does not acquire animals from farms involved with deforestation of native forests, invasion of indigenous lands or environmental conservation areas, or that are embargoed by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA). It also will not work with suppliers involved in rural violence or land conflicts, or who utilize slave or child labor To disseminate the policy internally, there is a constant internal communication work dedicated to the leaders and other employees, containing information on the JBS Responsible Purchase Policy, as well as communication campaigns - which are available on the Intranet and corporate emails. The theme is also addressed in the integration of new employees, as well as being widely disseminated in the annual conventions of the various JBS departments. For raw material purchasing teams, which are directly affected by vendor blocking / release, periodic training and documents describing the rules and procedures against the company's socio-environmental criteria are carried out through internal communication campaigns, in addition the most relevant information on strategic sustainability issues (including the supply chain - guarantee of origin) is disseminated, as well as information regarding to the annual audits of the Public Commitment on Livestock. . In the independent audits carried out annually for the Public Commitment on Livestock, emphasis was placed on 2018, in which JBS obtained its best result (100%) since the beginning of the audits. JBS was also highlighted for the audit of the Pará TAC, in which the Federal Public Ministry classified its efforts as positive and satisfactory. In 2019, JBS will formalize a Responsible Purchase Policy, in addition to a policy compliance manual, which will be extended to its internal team.

**F4.1b**

**(F4.1b) Do you have commodity specific sustainability policy(ies)? If yes, select the options that best describe their scope and content.**

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Timber	Yes	<Not Applicable>	<Not Applicable>	JBS informs and guides its suppliers regarding its social and environmental criteria and tries to diversify its supply chain. To mitigate the risk of purchasing timber from suppliers involved in deforestation, JBS established a Normative Instruction of Biomass Purchasing, stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with the company.
Palm Oil	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Cattle Products	Yes	<Not Applicable>	<Not Applicable>	To mitigate the risk of acquiring raw materials from suppliers involved in the deforestation of native forests, the invasion of protect areas, such indigenous land or environmental conservation units and the use of child or compulsory labor, JBS Brazil has adopted a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. The Company does not acquire animals from farms involved with deforestation of native forests, invasion of indigenous lands or environmental conservation areas, or that are embargoed by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA). It also will not work with suppliers involved in rural violence or land conflicts, or who utilize slave or child labor. In 2019, JBS will formalize a Responsible Purchase Policy, in addition to a policy compliance manual, which will be extended to its internal team. In the independent audits carried out annually for the Public Commitment on Livestock, emphasis was placed on 2018, in which JBS obtained its best result (100%) since the beginning of the audits. JBS was also highlighted for the audit of the Pará TAC, in which the Federal Public Ministry classified its efforts as positive and satisfactory.
Soy	Yes	<Not Applicable>	<Not Applicable>	JBS only purchases soy from suppliers that follows/meets the Soy Moratorium. The purchase from large suppliers that are part of the Brazilian Association of Vegetable Oils Industries (ABIOVE) and Brazilian National Association of Cereal Exporters (ANEC) guarantees that the commodity complies with the criteria established in the Soy Moratorium.
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

**F4.2**

**(F4.2) Is there board-level oversight of forests-related issues within your organization?**

Yes

**F4.2a**

**(F4.2a) Identify the position(s) of the individual(s) (do not include any names) on the board with responsibility for forests-related issues.**

Position of individual	Please explain
Director on board	Sustainability Committee, which is responsible for dealing with and connecting all topics related to the company's business in an overall perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. As the Sustainability Committee is composed of six members from the company's top management, including the two presidents and the COO Global (Chief Operating Officer), a comprehensive analysis can be performed as part of the deforestation risk assessment procedures. From 2019, the Committee will be chaired by the Chairman of the Board of Directors of JBS.

**F4.2b**

**(F4.2b) Provide further details on the board’s oversight of forests-related issues.**

	Frequency that forests-related issues are a scheduled agenda item	Governance mechanisms into which forests-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Setting performance objectives	JBS has five multidisciplinary non-statutory committees working with the company’s management in order to support the Board of Directors and make the company’s processes more robust. One of these committees is the Sustainability Committee, responsible for dealing with and connecting all topics related to the company’s business in a global perspective. This role include the identification, addressing and treatment of critical issues that result in risks or business impact; monitoring and implementation of policies, strategies and specific initiatives; and evaluation of proposals of investments in sustainability. It is composed by six members from the company’s top management. Among the responsibilities of the Sustainability Committee, there is the monitoring of the results of the procurement system - besides being responsible for discussing issues related to the other strategic themes of sustainability. The group reports directly to the Board of Directors (CA).

**F4.3**

**(F4.3) Provide the highest management-level position(s) or committee(s) with responsibility for forests-related issues (do not include the names of individuals).**

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on forests-related issues	Please explain
President	Both assessing and managing forests-related risks and opportunities	More frequently than quarterly	JBS has multidisciplinary non-statutory committees working with the company's management in order to support the Board of Directors and make the company's processes more robust. One of these committees is the Sustainability Committee, which meets quarterly and is responsible for advise the Board of Directors in the process of fulfillment it's legal attributions. Additionally, the Board of Director's chairman is involved in the meetings between Sustainability Committee and the Board of Directors. The main responsibilities of the Sustainability Committee is to organize and coordinate the activities of the Committee, including, among other duties: (a) to propose, by the beginning of each fiscal year, the schedule of activities for the corresponding fiscal year, including the annual calendar of regular meetings; (b) define the order of business, convene, set up and chair the meetings of the Committee; (c) represent the Committee before any other corporate governance bodies of the Company, signing, as necessary, any correspondence, invitations and reports on behalf of the Committee; (d) report to the Board of Directors on the work carried out by the Committee.
Chief Sustainability Officer (CSO)	Both assessing and managing forests-related risks and opportunities	More frequently than quarterly	The Sustainability Committee is responsible for dealing with and connecting all topics related to the company's business in an overall perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. The information is handled weekly between the Business Unit Presidency and Board of Directors. The Sustainability Committee meets quarterly
President	Both assessing and managing forests-related risks and opportunities	More frequently than quarterly	The Sustainability Committee is responsible for dealing with and connecting all topics related to the company's business in an overall perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. The information is handled weekly between the Business Unit Presidency and Board of Directors. The Sustainability Committee meets quarterly.
Sustainability committee	Both assessing and managing forests-related risks and opportunities	More frequently than quarterly	The Sustainability Committee is responsible for dealing with and connecting all topics related to the company's business in an overall perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. The information is handled weekly between the Business Unit Presidency and Board of Directors. The Sustainability Committee meets quarterly. The company conducts its sustainability based on well defined objectives: improve risk management (especially those related to to its supply chain); decrease the environmental footprint business (water, emissions, energy and waste); improve their eco-efficiency and their with society; and encourage innovation. The aim is to make the JBS A Leading Company In Use sustainable use of natural resources, minimizing their demand and reducing waste generation to achieve production of even better quality.
Environment/Sustainability manager	Both assessing and managing forests-related risks and opportunities	More frequently than quarterly	The Sustainability Committee is responsible for dealing with and connecting all topics related to the company's business in an overall perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. The information is handled weekly between the Business Unit Presidency and Board of Directors. The Sustainability Committee meets quarterly.
Buyers/purchasers	Both assessing and managing forests-related risks and opportunities	More frequently than quarterly	The Sustainability Committee is responsible for dealing with and connecting all topics related to the company's business in an overall perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. The information is handled weekly between the Business Unit Presidency and Board of Directors. The Sustainability Committee meets quarterly.

**F4.4**

**(F4.4) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?**

Yes

**F4.4a**

**(F4.4a) What incentives are provided to C-Suite employees or board members for the management of forests-related issues (do not include the names of individuals)?**

	Who is entitled to benefit from these incentives?	Indicator for incentivized performance	Please explain
Monetary reward	Chief Sustainability Officer (CSO)	Achievement of commitments and targets Supply chain engagement	The objective of each element of management compensation is to encourage the alignment of interests of managers with the Company's goals, in order to stimulate their commitment and also to attract and retain highly qualified professionals. The variable remuneration takes into consideration the next income determined by the Company, as well as an individual performance evaluation process, model 360° in which the performance and behavioral results are verified in the activity.
Recognition (non-monetary)	Chief Sustainability Officer (CSO)	Achievement of commitments and targets Supply chain engagement	Internal recognition (individual and area)
Other non-monetary reward	Please select	Please select	

**F4.5**

**(F4.5) Did your organization include information about its response to forests-related risks in its most recent mainstream financial report?**

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

RA e DF 2018 - CVM - Ing.pdf

<https://jbss.infoinvest.com.br/enu/4916/RA%20e%20DF%202018%20-%20CVM%20-%20Ing.pdf>

**F5. Business strategy**

**F5.1**

**(F5.1) Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?**

	Are forests-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, forests-related issues are integrated	5-10	Forest issues are fully integrated with JBS objectives, strategies and business plan, as well as our responsibility to produce sustainable, safe and quality food. The projects have specific objectives, but they have many synergies and generate convergent results. JBS has more than half of the refrigeration units and the chain of cattle factories, located in the Legal Amazon region. Thus, with increasing rates of deforestation in the Amazon, the risk of the company being hit and having to restrict the supply chain becomes high. In a cyclical way, the company understands that it is necessary to act strongly to raise awareness and engage suppliers to disseminate sustainability policy and make it more transparent, transforming its objectives, goals and concerns into the same of its suppliers. Sustainable Meat - JBS has been developing a document, which brings together a set of social and environmental criteria, aimed at adding sustainability to its products, in order to reach specific markets (national and international). Positive impact - Another objective of the company is related to generating a positive impact in the supply chain.
Strategy for long-term objectives	Yes, forests-related issues are integrated	5-10	Sustainable meat - sustainability attributes in products will be increasingly demanded by consumers, customers and the market in general, in order to provide sufficient information and guarantees that the products meet pre-defined socio-environmental criteria. Positive impact - the company will increasingly be generating a greater network of engagement, technical training and support for the environmental regularization of properties. Another focus is to provide technical knowledge of property and production management to its business partners (cattle ranchers), enabling increased productivity (generating higher income for the producer) in order to recover degraded pastures, generate reductions of GHG emissions and avoid the conversion of soil (forests into new areas for agricultural production) so as to avoid deforestation.
Financial planning	Yes, forests-related issues are integrated	5-10	Annually resources are allocated for the continuity of existing systems and programs, as well as new investments for the development of new projects. Currently, much of the budget is earmarked for risk prevention and management. The trend is that there is a natural reduction of risk prevention demands, which makes it possible to allocate resources to projects with positive impacts. The company also intends to allocate new resources to these projects, as well as to develop partnerships with companies that have common goals of reducing the environmental footprint (deforestation, GHG emissions, water consumption) in food production.

**F6. Implementation**

**F6.1**

**(F6.1) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?**

Yes

**F6.1a**

**(F6.1a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?**

Other, please specify (Livestock Public Commitment)

**F6.1b**

**(F6.1b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.**

**Commodity coverage**

Timber

**Criteria**

No sourcing of illegally produced and/or traded forest risk commodities

No sourcing of forest risk commodities from unknown/controversial sources

Restricting the sourcing and/or trade of forest risk commodities to credible certified sources

**Operational coverage**

Supply chain

**% of total production/ consumption covered by commitment**

100%

**Cutoff date**

Please select

**Commitment timeframe**

2020

**Please explain**

JBS only uses cardboard certified by Forest Stewardship Council (FSC), which is also a permanent commitment and certifies that the raw material used in the production of its packaging comes from forests maintained and managed responsibly, thus ensuring the best environmental practices throughout the productive process. In this way, by purchasing the certified material we ensure that the forests from which the raw material is derived were exploited in accordance with all existing laws, in an ecologically correct, socially just and economically viable way. In the case of wood (biomass used as fuel for industrial boilers) 100% of timber suppliers have to present the Forest Origin Document, which is a mandatory license established by the Ministry of the Environment (MMA) for the control of native forestry product and sub product transportation and commercialization. It presents information on the origin, destination, quantity and purpose of transportation. JBS reaffirms that despite the reported deadline the company's commitment is continuous.

**Commodity coverage**

Cattle Products

**Criteria**

Zero gross deforestation

**Operational coverage**

Supply chain

**% of total production/ consumption covered by commitment**

100%

**Cutoff date**

Please select

**Commitment timeframe**

2020

**Please explain**

JBS made a public commitment to not purchase cattle from ranches responsible for deforestation of the Amazon Biome region, which is a permanent commitment. To ensure compliance, JBS developed a social and environmental monitoring system for the farms that supply livestock to the company. This monitoring system is composed of 2 integrated mechanisms of analysis. The first verifies the existence of farms or livestock supplier in the lists published by the MTE – Registry of Employers Fined for Compulsory Labor and the list of areas embargoed due to illegal deforestation published by the Brazilian Institute of the IBAMA. The second uses a geographic information system for the geo-spatial monitoring of farms supplying the company with livestock located in the Legal Amazon region to identify suppliers involved in deforestation, invasion of indigenous lands or environmental conservation units. To comply with the commitment, the System for livestock supplier farms is audited annually, and the results are published on JBS's website. JBS has improved its Monitoring System in a joint effort with the Departments of Sustainability, Cattle Sourcing and Information Technology, and with the support of a specialized consulting firm. Around 90 thousand registered Brazilian cattle suppliers are assessed daily using satellite imagery, farm geo-referencing data and information from government agencies. This monitoring system covers over 59 million ha in the Amazon region and 437 Brazilian cities. If it detects farms that fail to comply with any of the Company's social and environmental criteria, the system suspends trading with the supplier and blocks purchases until the situation has been corrected. Zero Deforestation conversion: the generation of engagement of its suppliers, through technical training aimed at the management of property and the production, which enables the increase productivity, in order to recover degraded pastures, generate reductions of GHG emissions and avoid the conversion of soil to new agricultural production areas in order to allow deforestation. Forest Restoration: Vendors who are blocked, are not eligible for JBS, are guided by techniques and are encouraged to seek the regularization of their properties. For the deforestation criteria, for a property regularization, the project must present a reforestation recovery project for the degraded area.

**Commodity coverage**

Soy

**Criteria**

Zero gross deforestation

**Operational coverage**

Supply chain

**% of total production/ consumption covered by commitment**

100%

**Cutoff date**

Please select

**Commitment timeframe**

2020

**Please explain**

JBS only purchases soy from suppliers that follows the Soy Moratorium, which is a permanent commitment. . In July 2006, the Brazilian Association of Vegetable Oils Industries - ABIOVE and the Brazilian Association of Cereal Exporters - ANEC pledged not to market or finance the soybeans produced in areas that were deforested in the Amazon Biome after that date. The Moratorium responded to the questioning of environmental groups and clients from Brazil abroad that started to promote arrangements to generate new sustainable rules for the cultivation and commercialization of soybeans. The monitoring of the Soy Moratorium produced evidence that the soy have a negligible participation in the deforestation that occurred after July 2006 and that the expansion of the Brazilian soybean is not an important vector of deforestation in the Amazon Biome. JBS reaffirms that despite the reported deadline the company's commitment is continuous.

---

**F6.2**

---

**(F6.2) Did you have any quantified targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?**

Yes

**F6.2a**

---

**(F6.2a) Provide details of your target(s) for increasing sustainable production and/or consumption of the disclosed commodity(ies), and progress made.****Target reference number**

Target 1

**Forest risk commodity**

Timber

**Form of commodity covered**

Secondary packaging

**Type of target**

Sustainable procurement standard

**Coverage**

Supply chain

**Traceability point**

&lt;Not Applicable&gt;

**Third-party certification scheme**

&lt;Not Applicable&gt;

**Start year**

2015

**Start figure**

0%

**Target year**

2018

**Target**

100%

**% achieved**

100%

**Please explain**

JBS is one of the largest consumers of paper/cardboard in Brazil, as it uses the material to produce the packaging for its products. 100% of the paper/cardboard acquired has FSC certification, which is part of the selection criteria for suppliers of this material. JBS has a target to 100% of timber purchases comply with the criteria established in JBS Environmental Policy. Since FSC certification is a purchasing criteria, 100% of the product / suppliers are in agreement with this criteria.

---

**Target reference number**

Target 1

**Forest risk commodity**

Cattle Products

**Form of commodity covered**

Hides/ leather

Other, please specify

**Type of target**

Sustainable production standard

**Coverage**

Direct operations

**Traceability point**

&lt;Not Applicable&gt;

**Third-party certification scheme**

&lt;Not Applicable&gt;

**Start year**

2012

**Start figure**

41-50%

**Target year**

2018

**Target**

100%

**% achieved**

100%

**Please explain**

JBS Couros currently operates 17 units that have been certified by the Leather Working Group (LWG), all receiving top marks for traceability. The LWG is an international initiative involving companies, retail chains, tanneries and suppliers to debate and promote efficient and sustainable farming practices across the global leather industry – and has been directly involved with the Group in developing protocols and organizing discussion forums to debate best practices. Additionally, JBS has made a public social commitment to not purchase cattle from farms responsible for deforestation in the Amazon Biome region. To ensure compliance with this commitment, in 2010 JBS developed a social and environmental monitoring system for farms that supply livestock to JBS. This system work in an integrated way. The first one works on a daily download of public agencies IBAMA and MTE dirty lists and a crosschecking of suppliers taxpayer numbers database against them. The second process analyses cattle farms in the Brazilian Legal Amazon based on geographical information. It performs by daily geo monitoring through the digital overlay of georeferenced maps of cattle supplier properties and deforestation maps published by National Space Research Institute (INPE) combined with official data from National Indigenous Foundation (FUNAI) and National Conservation Units System (SNUC). The suppliers, which aren't in comply with one or both process, are automatically blocked in the Enterprise Resource Planning System (ERP) and no purchasing operations are made.

---

**Target reference number**

Target 1

**Forest risk commodity**

Soy

**Form of commodity covered**

Soy bean meal

**Type of target**

Sustainable procurement standard

**Coverage**

Supply chain

**Traceability point**

<Not Applicable>

**Third-party certification scheme**

<Not Applicable>

**Start year**

2017

**Start figure**

0%

**Target year**

2018

**Target**

100%

**% achieved**

100%

**Please explain**

JBS has a target to 100% of soybean purchases comply with the criteria established in JBS Environmental Policy. Additionally, JBS only purchases soybeans from suppliers that are signatories to the Soybean Moratorium to ensure that no soybeans come from illegal deforestation regions in the Amazon Biome.

---

F6.3

**(F6.3) Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?**

	Do you have system(s) in place?
Timber	Yes
Palm Oil	<Not Applicable>
Cattle products	Yes
Soy	Yes
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

---

F6.4

**(F6.4) Do you specify any third-party certification schemes for your disclosed commodity(ies)? Indicate the volume and percentage of your production and/or consumption covered.**

**Forest risk commodity**

Timber

**Do you specify any certification scheme?**

Yes

**Certification coverage**

---

Please select

**Third-party certification scheme**

FSC Chain of Custody

**% of total production/consumption volume certified**

100

**Form of commodity**

Secondary packaging

**Volume of production/ consumption certified**

180

**Metric**

Other, please specify (Tons)

**Please explain**

JBS purchase cardboard (used in packaging) and paper in general (office use) only from certified suppliers by FSC (Forest Stewardship Council) in the form Chain of Custody. In this way, certification is a criterion for hiring the supplier, becoming a competitive differential. The use of cardboard in JBS operations is significant, since the products are stored and sold in secondary packaging made of it. JBS purchase pallets PBR (Brazilian pallet pattern) certified by ABRAS (Brazilian Association of Supermarkets).

---

**Forest risk commodity**

Cattle products

**Do you specify any certification scheme?**

Yes

**Certification coverage**

Please select

**Third-party certification scheme**

Other, please specify (Leather Working Group (LWG))

**% of total production/consumption volume certified**

100

**Form of commodity**

Hides/ leather

**Volume of production/ consumption certified**

357171

**Metric**

Other, please specify (tons)

**Please explain**

JBS Couros currently operates 17 units that have been certified by the Leather Working Group (LWG), all receiving top marks for traceability. The LWG is an international initiative involving companies, retail chains, tanneries and suppliers to debate and promote efficient and sustainable farming practices across the global leather industry – and has been directly involved with the Group in developing protocols and organizing discussion forums to debate best practices.

---

**Forest risk commodity**

Soy

**Do you specify any certification scheme?**

Yes

**Certification coverage**

Please select

**Third-party certification scheme**

Other, please specify (Soy Moratorium FGV/GVces)

**% of total production/consumption volume certified**

100

---

**Form of commodity**

Other, please specify (Soy Moratorium)

**Volume of production/ consumption certified**

1500000

**Metric**

Other, please specify (Tons)

**Please explain**

The company only purchases soy from suppliers that signed the Soy Moratorium. In 2016, JBS joined the Applied Life Cycle (CiViA) initiative of the Getúlio Vargas Foundation's Center for Sustainability Studies (FGV), with the objective of incorporating the quantification and management of the environmental impacts of products and services through the life cycle. Two pilot projects were developed (Picanha Maturatta Friboi and chicken from Seara), considering the carbon emissions and water consumption of all stages of production until the use and disposal of the final consumer. These projects have allowed the company a new look at the product, identifying the most representative production phases of environmental impacts and the related opportunities. Deforestation may be directly related to the carbon footprint of the products, since deforestation for livestock production or soybean production (cattle and poultry feed) may represent a large share of the emissions from land use change.

---

**F6.5**

---

**(F6.5) Do you specify any sustainable production/procurement standards for your disclosed commodity(ies), other than third-party certification? Indicate the percentage of production/consumption covered and if you monitor supplier compliance with these standards.**

**Forest risk commodity**

Timber

**Do you specify any sustainability standards?**

Yes

**Type of standard**

Procurement

**Description of standard**

The company has a Normative Instruction of Biomass Purchasing stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with JBS – 100% of the JBS timber suppliers are in comply with environmental standards. Moreover, before conducting the registration of biomass supplier, an environmental and social analysis must be performed based on IBAMA (Brazilian Environment and Natural Resources Institute) and MTE (Ministry of Labor) public dirty lists that show respectively, legal persons and entities with embargoed areas due to illegal deforestation/inappropriate land use and that are involved in slave labor. All environmental management of the biomass purchasing process is a responsibility of the environmental department of each operational unit. This includes management of the requirements Native Forest Consumer Registration and Forest Origin Document or other specific state requirement. JBS is one of the largest consumers of paper/cardboard in Brazil, as it uses the material to produce the packaging for its products. 100% of the paper/cardboard acquired has FSC certification, which is part of the selection criteria for suppliers of this material and covers the entire chain. Considering that 100% of cardboard bought by JBS is certified, all cardboard chain is covered.

**% of total commodity volume covered by standard**

100%

**Do you have a system in place to monitor compliance with this standard?**

Yes

**Type(s) of monitoring system**

<Not Applicable>

**% of suppliers in compliance with standards**

100%

**Please explain**

An important requirement from JBS to its suppliers is the Forest Origin Document, which is a mandatory license for the control of native forestry product and sub product transportation and commercialization. It presents information on the origin, destiny, quantity and purpose of transportation. When biomass is sourced from native species, it must be accompanied by a Forest Origin Document. Furthermore, before conducting the registration of biomass supplier, an environmental and social analysis must be performed based on IBAMA and Ministry of labor (MTE) public dirty lists that shows respectively, legal persons and entities with

---

embargoed areas due to illegal deforestation/inappropriate land use and that are involved in slave labor. Thus, 100% purchase suppliers and criteria are evaluated according to normative Instruction for buying biomass.

---

## Forest risk commodity

Cattle Products

### Do you specify any sustainability standards?

Yes

### Type of standard

Procurement

### Description of standard

According to JBS sustainability pillar of responsible purchase, Cattle suppliers included on the dirty lists published by the Ministry of Labor and IBAMA, and those whose land overlaps deforested areas, indigenous land or protected areas will be suspended by the company procurement system until they have remedied this situation. JBS Standards of cattle purchasing are expressed in the document "Minimum Criteria for Industrial – Scale Operations with Cattle and Beef Products in the Amazon Biome", which states that the company must not acquire cattle from areas with illegal deforestation, in the Amazon Biome and located within protected areas. To make sure that suppliers are complying with these standards, there is a System for Social and Environmental Monitoring of Cattle Suppliers that works on geospatial analysis based on satellite images, farms georeferenced maps and deforestation data from the National Space Research Institute for –INPE, which cover the whole direct operations. To ensure compliance with the JBS's commitments, an independent party annually audits the System. According to the results of the independent audit since 2014 the level of understanding is greater than 99%. In its most recent audit, 2018, one company got the best result from the audit process, with 100% of purchases being in compliance. JBS supports projects, which promotes sustainable practices to increase the productivity of farms in the Amazon region in order to develop a new operating model that preserves natural resources and that brings financial benefits to the ranchers in the region. The goal of the program is to increase its scope to serve 300 farms in the Alta Floresta (MT) region. Note that in addition to the ongoing encouragement of increases in income and productivity, this includes other objectives, such as the strengthening of the local economy, reduced deforestation, and the recovery and preservation of natural resources. JBS has been contributing to the development of differentiated bonus protocols, the opening of markets for products with social and environmental attributes, as well as support for training, earnings disclosure and fundraising for ongoing efforts.

### % of total commodity volume covered by standard

100%

### Do you have a system in place to monitor compliance with this standard?

Yes

### Type(s) of monitoring system

<Not Applicable>

### % of suppliers in compliance with standards

100%

### Please explain

JBS has made a public and social commitment to not purchase cattle from ranches that are responsible for deforestation inside the Amazon Biome region, as well as those that use labor analogous to slavery or that are located in indigenous lands or environmental conservation areas. The public agreement that establishes criteria for cattle purchases from properties located in the Amazon Biome region is entitled "Minimum Criteria for Industrial-Scale Operations with Cattle and Beef Products in the Amazon Biome" To comply with the commitment, JBS has developed a monitoring system, which is comprised of 2 analysis procedures. One involves a geospatial monitoring that performs the digital overlay of georeferenced cattle farms maps across official data of deforestation, including protected areas maps, such environmental conservation units and indigenous lands. The second performs the intersection of the registration data of the Company's cattle suppliers with the information from the public lists of areas embargoed by IBAMA - by illegal deforestation – and employers who used work practices that are degrading or analogous to slavery, according the Ministry of labor (MTE). An Independent audit is annually provided on the system basis, the results are available on JBS's website. According to the results of the independent audit since 2014 the level of understanding is greater than 99%. In its most recent audit, 2018, one company got the best result from the audit process, with 100% of purchases being in compliance. In addition, JBS has at least one pair of geographic coordinates of the supplier properties with which the company negotiated. It is important to mention that the JBS has made every effort to increase the number of suppliers that have digital maps of their properties. JBS manage the Legal Supplier Program, which helps JBS suppliers to regularize their CAR (Rural Environmental Registry). Through this program, JBS hires specialized consultants to advise its suppliers on the regularization process.

---

## Forest risk commodity

Soy

**Do you specify any sustainability standards?**

Yes

**Type of standard**

Procurement

**Description of standard**

The company only purchases soy from suppliers that signed the Soy Moratorium. Thus, 100% of JBS soy suppliers are in compliance with Soy Moratorium criteria. This standard cover the whole purchasing operations.

**% of total commodity volume covered by standard**

100%

**Do you have a system in place to monitor compliance with this standard?**

Yes

**Type(s) of monitoring system**

<Not Applicable>

**% of suppliers in compliance with standards**

100%

**Please explain**

JBS only purchases soy from suppliers that are signatories of the Soybean Moratorium, an initiative that works to ensure that no soybeans come from illegal deforestation regions in the Amazon Biome. Thus, 100% purchase suppliers and criteria are evaluated according to Soy Moratorium criteria.

---

F6.6

---

**(F6.6) Are you working with smallholders to encourage and support best practices that aim to reduce or remove deforestation/forest degradation?**

	Are you working with smallholders?	Smallholders engagement approach	Please explain
Timber	Yes, working with smallholders	<Not Applicable>	Regarding its supply chain, JBS has made significant environmental progress. One of the highlights was the partnership established under the New Field Program. The program promotes more sustainable production techniques at husbandry farms in the Amazon region proposing a crop-livestock-forest integration, as alternative source of income. In this sense, one of the program's objectives is to promote the diversification of income sources, through the planting of trees with commercial value.
Palm Oil	<Not Applicable>	<Not Applicable>	<Not Applicable>
Cattle Products	Yes, working with smallholders	<Not Applicable>	JBS Biodiesel has been supporting the Selo Combustível Social program for 10 years, that was developed by the Brazilian Federal Government aiming to offer a production purchase guarantee to small farmer by biodiesel companies. As currently, bovine fat is the second most important source of raw material for biodiesel production in Brazil, the government included livestock as part of the program, which benefits the family livestock and small producers. "JBS Biodiesel was structured to extend these benefits to the small farmer in São Miguel do Guaporé's region, Rondônia. Moreover, JBS develops and participates in several initiatives aimed to engaging with smallholders, as follows: The New Field program; Conexão Gestão: JBS has been working with a chain of suppliers to enable producers to improve production through production management. The initiative, provides livestock breeders with commercial training, helping to increase the efficiency of the beef chain. In partnership with the Instituto Integra and through a platform, the program intended to build a stronger relationship between the producer and the value chain by providing information on meat processing, marketing and sales. - Participations in fair and events: Since 2012, JBS has developed and implemented several actions in order to improve the relationship between the industry and the cattle rancher. Girodo Boi: A daily TV program for cattle breeders broadcast on the Rural Channel. The main highlight is the Brazil Tour, with information on daily prices JBS practices throughout the country. The program audience is 45% of JBS livestock suppliers. JBS got involved in the Sustainable Livestock Indicators Guide (GIPS) construction, developed by the Brazilian Roundtable on Sustainable Livestock (GTPS), which can be applied to small farms. The tool contains themes such as Business Management, Communities, Workers, Environment and Value Chain. In GIPS criterion 4.9, issues related to deforestation are assessed. . Since 2007, joining the Social Fuel Stamp program, JBS has already benefited 100 small producers of cattle . JBS offers free assistance to livestock farmers through a technical team composed of agronomist engineers, agricultural and others. More information available in: <a href="https://jbs.com.br/imprensa/release/projeto-social-da-jbs-gera-renda-para-pequenos-pecuaristas-de-rondonia/">https://jbs.com.br/imprensa/release/projeto-social-da-jbs-gera-renda-para-pequenos-pecuaristas-de-rondonia/</a>
Soy	Yes, working with smallholders	<Not Applicable>	Seara has a dedicated technical team to monitor poultry and pork producers, providing technical assistance for responsible production and guidance regarding Good Practices. In order to guide about management of production, Seara has a team of more than 300 extension agents, who accompany the producers with frequent visits in production offering assistance for responsible production considering the required quality standards and the principles of Animal Welfare. These extensionists also verify the environmental practices adopted in the farms and breeding sites provided in contracts, in order to ensure that they are in line with the guidelines given by Seara, which include, for example, the use of cisterns to collect rainwater, biodigesters and Composting. The visits also include orientations to increase productivity using fewer resources. So on, JBS seeks to produce animal feed with a better nutritional balance so that the producer can gain efficiency with less soy use, what decreases the commodity risks for the company. JBS Biodiesel has been supporting the Selo Combustível Social program for nine years, that was developed by the Brazilian Federal Government aiming to offer a production purchase guarantee to small farmer by biodiesel companies. In this sense, JBS offers support to small producers through a technical team that goes to the field to encourage and instruct them on the advantages of joining the program. Since 2007, joining the Social Fuel Stamp program, JBS Biodiesel has already benefited more than 5,000 small grain producers through the acquisition of soybean. JBS offers free assistance to producers through a technical team composed of agronomists, specialized technicians and others. More information available in: <a href="https://jbs.com.br/imprensa/release/jbs-biodiesel-estreita-relacao-com-pequeno-pecuarista/">https://jbs.com.br/imprensa/release/jbs-biodiesel-estreita-relacao-com-pequeno-pecuarista/</a> .
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>

**F6.7**

**(F6.7) Are you working with your direct suppliers to support and improve their capacity to supply sustainable raw materials?**

	Are you working with direct suppliers?	Supplier engagement approach	Please explain
Timber	Yes, working with direct suppliers	<Not Applicable>	Encouraging certification: In establishing the purchase criteria of certified suppliers, JBS encourages the market to obtain certifications. • Supplier questionnaires on environmental and social indicators: In 2018, JBS invited cardboard suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, developed by CDP exclusively for companies to evaluate and stimulate their suppliers, considers the policies, strategies, management of opportunities and risks in relation to the actions of combating deforestation in the production of agricultural commodities. • Workshops and webinars In 2018, JBS invited 6 cardboard suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, developed by CDP exclusively for companies to evaluate and stimulate their suppliers, considers the policies, strategies, management of opportunities and risks in relation to the actions of combating deforestation in the production of agricultural commodities. • Customer engagement CDP, in partnership with JBS, conducts several workshops / training to encourage and clarify doubts for suppliers to answer questions, as well as the opportunity to identify benchmarks and encourage the development of related practices of those who have not yet evolved in actions.
Palm Oil	<Not Applicable>	<Not Applicable>	<Not Applicable>
Cattle products	Yes, working with direct suppliers	<Not Applicable>	Developing or distributing supply chain mapping tool: JBS has several initiatives to develop and encourage a more sustainable chain of suppliers:1)New Field Program (Programa Novo Campo), which promotes more sustainable production techniques at husbandry farms in the Amazon region 2)Legal Supplier Programa (Fornecedor Legal) Was created to advise JBS's cattle supply chain in Brazil on how to suit legislation changes in Brazil in the last years. JBS selected regionals specialized consulting companies in environmental regulation to support its cattle suppliers with the CAR regulation process. JBS's communications channels, mainly Giro do Boi Show at the Rural channel, were used to guide farmers on how to regularize their operations and implement CAR.; 3)Green Light Pact (Pacto Sinal Verde), an initiative to classify 100% of carcass originated from Mato Grosso do Sul region, one of the most important production centers in Brazil. This Goal was achieved by JBS in January 2016; 4) JBS Connexion Program (ProgramaConexão JBS): direct communication platform with JBS suppliers in Brazil, focused in commercial education. It aims to approach cattle breeder to supply chain through information regarding beef industrialization, market and sales 5)Cattle Breeder Portal (Portal do Pecuarista), whereby the breeders have free access to the complete cattle slaughter of each one of their farms, the standard photographic classes finishing with academic validation of associations and experts to the classification of carcasses is transparent and auditable; 6)Quality Light (Farol da Qualidade) – This tool lists the technics parameters of carcass in green light (default desirable), yellow light (tolerable standard) and lighthouse red (undesirable pattern) Supplier questionnaires on environmental and social indicators In 2018, JBS invited cattle suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, • Workshops and training / Costumer engagement In 2017, JBS invited cattle suppliers to participate and respond to the CDP Supply Chain Forests questionnaire CDP, in partnership with JBS, conducts several workshops / trainings to encourage and clarify doubts for suppliers to answer questions, as well as the opportunity to identify benchmarks and encourage the development of related practices of those who have not yet evolved in actions.
Soy	Yes, working with direct suppliers	<Not Applicable>	JBS produces and distributes animal feed to its integrated poultry and pork producers. Taking into account that JBS only buys soy products from the Soy Moratorium big signatory companies, the company can ensure that the soy used for animal feed is not associated with deforestation, so on guaranteeing that the animals´ feed has a sustainable origin. Encouraging certification In establishing the criterion of buying only from suppliers that comply with the Soy Moratorium, JBS encourages the market to adhere to the Moratorium. • Supplier questionnaires on environmental and social indicators: In 2018 JBS invited soybean suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, developed by CDP exclusively for companies to evaluate and stimulate their suppliers, considers policies, strategies, opportunities and risk management in relation to combat actions deforestation in the production of agricultural commodities. • Workshops and training: In 2018, JBS invited 10 soybean suppliers to participate in and respond to the CDP Supply Chain Forests questionnaire, developed by CDP exclusively for companies to evaluate and stimulate their suppliers, considers policies, strategies, opportunities and risk management in relation to the actions of combating deforestation in the production of agricultural commodities. CDP, in partnership with JBS, conducts several workshops / trainings to encourage and clarify doubts for suppliers to answer questions, as well as the opportunity to identify benchmarks and encourage the development of related practices of those who have not yet evolved in actions.
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>

**F6.9**

**(F6.9) Do you participate in external initiatives or activities to further the implementation of your policies concerning the sustainability of your disclosed commodity(ies)?**

**Forest risk commodity**

Timber

**Do you participate in activities/initiatives?**

Yes

**Activities**

Involved in multi-partnership or stakeholder initiatives

**Initiatives**

<Not Applicable>

**Please explain**

In 2017, JBS joined the CDP Supply Chain Forests pilot project, in which the company is a founding member of the initiative in Brazil. Through the SC Forests questionnaire, it will be possible to engage suppliers to share their initiatives and to encourage the establishment of new policies. Thus, JBS invited suppliers to participate and respond to the CDP Supply Chain Forests questionnaire, developed by CDP exclusively for companies to evaluate and stimulate their suppliers, considers policies, strategies, opportunities and risks management in relation to actions to combat deforestation in the production of agricultural commodities. This initiative encourages direct suppliers to develop actions and monitor their supply chain (chain of indirect).

---

**Forest risk commodity**

Cattle Products

**Do you participate in activities/initiatives?**

Yes

**Activities**

Involved in multi-partnership or stakeholder initiatives

**Initiatives**

<Not Applicable>

**Please explain**

JBS is a founding member and acts on the Board of Directors and Executive Committee of the Global Roundtable for Sustainable Beef (GRSB), a multi-stakeholder initiative for sustainable beef production. It is also a member of the Working Group (WG) on Sustainable Beef (GTPS) and of the Leather WG and Technical Sub-Group and Trader WG.

---

**Forest risk commodity**

Cattle Products

**Do you participate in activities/initiatives?**

Yes

**Activities**

Engaging with policymakers or governments

**Initiatives**

<Not Applicable>

**Please explain**

In order to improve its controls, seeking access to information and discussions with different regulatory agents, JBS participated in several meetings with the Federal Public Prosecutor, especially in the State of Pará, presented and suggesting technical rules to have a supply chain free of deforestation. An example of this was the performance of an independent audit to verify compliance with the State of Pará's Behavior Adjustment Code (TAC), JBS was recognized among the companies that obtained a "positive and satisfactory" result from the commitments entered into with the Federal Public Ministry. JBS also participates in the Working Group for the Control of Deforestation in the Chain Livestock Production, created by the Ministry of the Environment and composed of government agencies, a beef cattle and retail business, as well as NGOs and other stakeholders.

---

**Forest risk commodity**

Cattle Products

**Do you participate in activities/initiatives?**

Yes

**Activities**

Engaging with non-governmental organizations

**Initiatives**

<Not Applicable>

**Please explain**

The company reports GHG emissions data and information on climate change management strategy, such as the GHG Protocol Brazil, CDP Climate Change, and the Carbon Efficient Index (ICO2) of BM&FBOVESPA. Besides JBS has participated in the

---

Scope 3 Technical WG of the Brazilian GHG Protocol Program, and in the WG of the Agriculture GHG Protocol. JBS's participation in the CDP comprises Forest, Climate Change, Water and Supply Chain modules, In 2016, JBS joined the Applied Life Cycle (CiViA) initiative of the Getúlio Vargas Foundation's Center for Sustainability Studies (FGV), with the objective of quantify and manage the environmental impacts of products and services through the life cycle. 2 pilot projects were developed, considering the carbon emissions and water consumption of all stages of production until the use and disposal of the final consumer. These projects have allowed the company a new look at the product, identifying the most representative production phases of environmental impacts and the related opportunities. In 2017, JBS joined the CDP Supply Chain Forests pilot project, in which the company is a founding member of the initiative in Brazil.

---

#### **Forest risk commodity**

Soy

#### **Do you participate in activities/initiatives?**

Yes

#### **Activities**

Engaging with policymakers or governments

#### **Initiatives**

<Not Applicable>

#### **Please explain**

Selo Combustível Social: JBS Biodiesel has been supporting the Selo Combustível Social program for nine years, that was developed by the Brazilian Federal Government aiming to offer a production purchase guarantee to small farmer by biodiesel companies. JBS provides support to small producers through a technical team that goes to the field to encourage and educate them about the advantages of joining the program. Since 2007, joining the Social Fuel Stamp program, JBS Biodiesel has already benefited more than 4,600 small grain producers through the acquisition of soybean sacks.

---

#### **Forest risk commodity**

Soy

#### **Do you participate in activities/initiatives?**

Yes

#### **Activities**

Engaging with non-governmental organizations

#### **Initiatives**

<Not Applicable>

#### **Please explain**

In 2017, JBS joined the CDP Supply Chain Forests pilot project, in which the company is a founding member of the initiative in Brazil. Through the SC Forests questionnaire, it will be possible to engage suppliers to share their initiatives and to encourage the establishment of new policies.

---

#### **Forest risk commodity**

Cattle Products

#### **Do you participate in activities/initiatives?**

Yes

#### **Activities**

Involved in multi-partnership or stakeholder initiatives

#### **Initiatives**

<Not Applicable>

#### **Please explain**

JBS also participates in the Working Group for the Control of Deforestation in the Chain Production of Livestock, created by the Ministry of the Environment and composed of government agencies, cattle and retail sector companies, ONGs and other stakeholders. These are activities of the Working Group for the Control of Deforestation in the Chain. Livestock Productivity: I - identify government and other initiatives on livestock initiatives to promote sustainability and to monitor the production chain; II - propose actions aimed at the promotion of sustainability and control of the origin in the chain production of livestock; III - contribute to the implementation of the Plan of Action for the Prevention and Deforestation in the Amazon (PPCDAm) and the Plan of Action for the Prevention and Control of Deforestation and Burning in the Cerrado (PPCerrado); IV - to contribute to the construction of sectoral animal husbandry agreements, aiming the illegal deforestation; and V - develop solutions for controlling the origin of livestock and for verifying the rural properties.

---

---

**Forest risk commodity**

Cattle Products

**Do you participate in activities/initiatives?**

Yes

**Activities**

Involved in multi-partnership or stakeholder initiatives

**Initiatives**

&lt;Not Applicable&gt;

**Please explain**

In addition, JBS participated in the elaboration of the Sustainable Livestock Indicators Guide (GIPS), developed by the Brazilian Roundtable on Sustainable Livestock (GTPS), which can be applied to small farms. 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 the 4.9 criterion of the GIPS, issues related to deforestation are assessed.

---

## F7. Linkages and trade-offs

---

### F7.1

---

**(F7.1) Has your organization identified any linkages or trade-offs between forests and other environmental issues in its direct operations and/or other parts of its value chain?**

Yes

#### F7.1a

---

**(F7.1a) Describe the linkages or trade-offs and the related management policy or action.****Linkage/tradeoff**

Linkage

**Type of linkage/tradeoff**

&lt;Not Applicable&gt;

**Description of linkage/tradeoff**

Considering JBS significance in the cattle supply chain in the country, the company acts through the Responsible Sourcing Policy and other programs, to stimulate the fulfillment of socio-environmental criteria in cattle farms. Generating numerous positive impacts related to the conservation of native forests in the Legal Amazon region.

**Policy or action**

JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. Through the New Field Program JBS promotes more sustainable production techniques at husbandry farms in the Amazon region. It has a strong approach on enhancing productivity through the diversification of income sources, cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main environmental issue in the Amazon region and can be a Linkage with carbon sequestration or increased availability of water, once it indirectly eliminates the need for more deforestation as it intensifies production in the same dimension of area. Consolidate results of the program: Reduction of methane emissions (from 353 to 180 gCH<sub>4</sub>/KgLW); Reduction of slaughtering age (from 44 to 34 for males and from 34 to 24 months for females); Increase in stocking density (from 1.22 to 1.61 animal units/ha); Increase in productivity (from 70 to 160 KgCW/ha/yr); Increase in gross margin (from 0-100 to 680 R\$/ha/yr; Reduction of about 20% in the production cycle of cattle; Increase in productivity from 4.7 to more than 10/hectare/ year; Improvement in the quality of the beef; and Increase in income for producers.

---

**Linkage/tradeoff**

---

Linkage

**Type of linkage/tradeoff**

<Not Applicable>

**Description of linkage/tradeoff**

Considering JBS significance in the cattle supply chain in the country, the company acts through the Responsible Sourcing Policy and other programs, to stimulate the fulfillment of socio-environmental criteria in cattle farms. Generating numerous positive impacts related to the conservation of native forests in the Legal Amazon region.

**Policy or action**

JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. Through the New Field Program JBS promotes more sustainable production techniques at husbandry farms in the Amazon region. It has a strong approach on enhancing productivity through the diversification of income sources, cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main environmental issue in the Amazon region and can be a Linkage with carbon sequestration or increased availability of water, once it indirectly eliminates the need for more deforestation as it intensifies production in the same dimension of area. Consolidate results of the program: Reduction of methane emissions (from 353 to 180 gCH4/KgLW); Reduction of slaughtering age (from 44 to 34 for males and from 34 to 24 months for females); Increase in stocking density (from 1.22 to 1.61 animal units/ha); Increase in productivity (from 70 to 160 KgCW/ha/yr); Increase in gross marging (from 0-100 to 680 R\$/ha/yr; Reduction of about 20% in the production cycle of cattle; Increase in productivity from 4.7 to more than 10/hectare/ year; Improvement in the quality of the beef; and Increase in income for producers.

---

**Linkage/tradeoff**

Linkage

**Type of linkage/tradeoff**

<Not Applicable>

**Description of linkage/tradeoff**

Considering JBS significance in the cattle supply chain in the country, the company acts through the Responsible Sourcing Policy and other programs, to stimulate the fulfillment of socio-environmental criteria in cattle farms. Generating numerous positive impacts related to the conservation of native forests in the Legal Amazon region.

**Policy or action**

JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. Through the New Field Program JBS promotes more sustainable production techniques at husbandry farms in the Amazon region. It has a strong approach on enhancing productivity through the diversification of income sources, cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main environmental issue in the Amazon region and can be a Linkage with carbon sequestration or increased availability of water, once it indirectly eliminates the need for more deforestation as it intensifies production in the same dimension of area. Consolidate results of the program: Reduction of methane emissions (from 353 to 180 gCH4/KgLW); Reduction of slaughtering age (from 44 to 34 for males and from 34 to 24 months for females); Increase in stocking density (from 1.22 to 1.61 animal units/ha); Increase in productivity (from 70 to 160 KgCW/ha/yr); Increase in gross marging (from 0-100 to 680 R\$/ha/yr; Reduction of about 20% in the production cycle of cattle; Increase in productivity from 4.7 to more than 10/hectare/ year; Improvement in the quality of the beef; and Increase in income for producers.

---

**Linkage/tradeoff**

Linkage

**Type of linkage/tradeoff**

<Not Applicable>

**Description of linkage/tradeoff**

Considering JBS significance in the cattle supply chain in the country, the company acts through the Responsible Sourcing Policy and other programs, to stimulate the fulfillment of socio-environmental criteria in cattle farms. Generating numerous positive impacts related to the conservation of native forests in the Legal Amazon region.

**Policy or action**

JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. Through the New Field Program JBS promotes more sustainable production techniques at husbandry farms in the Amazon region. It has a strong approach on enhancing productivity through the diversification of income sources, cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main environmental issue in the Amazon region and can be a Linkage with carbon sequestration or increased availability of water, once it indirectly eliminates the need for more deforestation as it intensifies production in the same dimension of area. Consolidate results of the program: Reduction of methane emissions (from 353 to 180 gCH4/KgLW); Reduction of slaughtering age (from 44 to 34 for males and from

---

34 to 24 months for females); Increase in stocking density (from 1.22 to 1.61 animal units/ha); Increase in productivity (from 70 to 160 KgCW/ha/yr); Increase in gross margin (from 0-100 to 680 R\$/ha/yr); Reduction of about 20% in the production cycle of cattle; Increase in productivity from 4.7 to more than 10/hectare/ year; Improvement in the quality of the beef; and Increase in income for producers.

---

#### **Linkage/tradeoff**

Tradeoff

#### **Type of linkage/tradeoff**

<Not Applicable>

#### **Description of linkage/tradeoff**

The lack of government policies for the environmental regularization of properties with environmental liabilities, in addition to governmental incentives policies for forest conservation, generates a significant number of suppliers "excluded" from the value chain of Brazilian livestock. Since rural properties with environmental liabilities, in some cases, have difficulty to find legal ways for environmental regulation.

#### **Policy or action**

JBS Brazil has a Responsible Sourcing Policy that establishes social and environmental criteria for suppliers selection. Through the New Field Program JBS promotes more sustainable production techniques at husbandry farms in the Amazon region. It has a strong approach on enhancing productivity through the diversification of income sources, cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main environmental issue in the Amazon region and can be a Linkage with carbon sequestration or increased availability of water, once it indirectly eliminates the need for more deforestation as it intensifies production in the same dimension of area. Consolidate results of the program: Reduction of methane emissions (from 353 to 180 gCH<sub>4</sub>/KgLW); Reduction of slaughtering age (from 44 to 34 for males and from 34 to 24 months for females); Increase in stocking density (from 1.22 to 1.61 animal units/ha); Increase in productivity (from 70 to 160 KgCW/ha/yr); Increase in gross margin (from 0-100 to 680 R\$/ha/yr); Reduction of about 20% in the production cycle of cattle; Increase in productivity from 4.7 to more than 10/hectare/ year; Improvement in the quality of the beef; and Increase in income for producers.

---

#### **Linkage/tradeoff**

Linkage

#### **Type of linkage/tradeoff**

<Not Applicable>

#### **Description of linkage/tradeoff**

Development of a more sustainable livestock production, improving the management of the property and of the indicators of production by the producers.

#### **Policy or action**

JBS and the Working Group on Sustainable Livestock (GTPS) brought together technicians from the Company's field team, collaborators from the cattle purchase area and 30 partner producers that are part of the Social Fuel Stamp Program for training on the Livestock Indicators Guide Sustainable Development (GIPS). Bovine tallow, a co-product of meat processing, is the second most important source of biodiesel feedstock in Brazil, JBS Biodiesel produces biofuel from bovine tallow - animal slaughter residue. The initiative brings the main ground that the better the management, the more efficient the production, helping the farmer not only to produce more, but to produce better and in a more profitable way. Participants worked on themes such as regional development, sustainability, guidance for continuous improvement and GIPS operation.

---

## **F8. Verification**

---

### **F8.1**

---

#### **(F8.1) Do you verify any forests information reported in your CDP disclosure?**

Yes

#### **F8.1a**

---

---

**(F8.1a) Which data points within your CDP disclosure have been verified, and which standards were used?****Disclosure module**

F0. Introduction

**Data points verified**

All issues that address the Socio-Environmental Monitoring System for the cattle livestock farms are annually audited by a third party.

**Verification standard**

Third party audit. According to NBC TSC 4.400, specific Standard for Pre-Agreed Works.

**Please explain**

The cattle procurement operations and the entire monitoring system of suppliers are audited annually and independently. The standard used was adopted by agreement between the stakeholders of the public Livestock agreement.. The results of the audits are published on the JBS website. The independent audits reveal that, since 2013, more than 99% of JBS cattle purchases from farms located in the Amazon region complied with the company's social and environmental criteria and with its agreement with the commitment, called the "Public Livestock Commitment". In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers, in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL, recognized worldwide for socio-environmental audit work.

---

**Disclosure module**

F1. Current State

**Data points verified**

All issues that address the Socio-Environmental Monitoring System for the cattle livestock farms are annually audited by a third party.

**Verification standard**

Third party audit. According to NBC TSC 4.400, specific Standard for Pre-Agreed Works.

**Please explain**

The cattle procurement operations and the entire monitoring system of suppliers are audited annually and independently. The standard used was adopted by agreement between the stakeholders of the public Livestock agreement.. The results of the audits are published on the JBS website. The independent audits reveal that, since 2013, more than 99% of JBS cattle purchases from farms located in the Amazon region complied with the company's social and environmental criteria and with its agreement with the commitment, called the "Public Livestock Commitment". In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers, in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL, recognized worldwide for socio-environmental audit work.

---

**Disclosure module**

F2. Procedures

**Data points verified**

All issues that address the Socio-Environmental Monitoring System for the cattle livestock farms are annually audited by a third party

**Verification standard**

Third party audit. According to NBC TSC 4.400, specific Standard for Pre-Agreed Works.

**Please explain**

The cattle procurement operations and the entire monitoring system of suppliers are audited annually and independently. The standard used was adopted by agreement between the stakeholders of the public Livestock agreement.. The results of the audits are published on the JBS website. The independent audits reveal that, since 2013, more than 99% of JBS cattle purchases from farms located in the Amazon region complied with the company's social and environmental criteria and with its agreement with the commitment, called the "Public Livestock Commitment". In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers, in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL, recognized worldwide for socio-environmental audit work.

---

**Disclosure module**

F3. Risks and opportunities

**Data points verified**

All issues that address the Socio-Environmental Monitoring System for the cattle livestock farms are annually audited by a third party.

**Verification standard**

Third party audit. According to NBC TSC 4.400, specific Standard for Pre-Agreed Works.

**Please explain**

The cattle procurement operations and the entire monitoring system of suppliers are audited annually and independently. The standard used was adopted by agreement between the stakeholders of the public Livestock agreement.. The independent audits reveal that, since 2013, more than 99% of JBS cattle purchases from farms located in the Amazon region complied with the company's social and environmental criteria and with its agreement with the commitment, called the "Public Livestock Commitment". In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers, in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL, recognized worldwide for socio-environmental audit work.

---

**Disclosure module**

F4. Governance

**Data points verified**

All issues that address the Socio-Environmental Monitoring System for the cattle livestock farms are annually audited by a third party.

**Verification standard**

Third party audit. According to NBC TSC 4.400, specific Standard for Pre-Agreed Works.

**Please explain**

The cattle procurement operations and the entire monitoring system of suppliers are audited annually and independently. The standard used was adopted by agreement between the stakeholders of the public Livestock agreement.. The independent audits reveal that, since 2013, more than 99% of JBS cattle purchases from farms located in the Amazon region complied with the company's social and environmental criteria and with its agreement with the commitment, called the "Public Livestock Commitment". In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers, in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL, recognized worldwide for socio-environmental audit work.

---

**Disclosure module**

F5. Strategy

**Data points verified**

All issues that address the Socio-Environmental Monitoring System for the cattle livestock farms are annually audited by a third party

**Verification standard**

Third party audit. According to NBC TSC 4.400, specific Standard for Pre-Agreed Works

**Please explain**

The cattle procurement operations and the entire monitoring system of suppliers are audited annually and independently. The standard used was adopted by agreement between the stakeholders of the public Livestock agreement.. The independent audits reveal that, since 2013, more than 99% of JBS cattle purchases from farms located in the Amazon region complied with the company's social and environmental criteria and with its agreement with the commitment, called the "Public Livestock Commitment". In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers, in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL, recognized worldwide for socio-environmental audit work.

---

**Disclosure module**

F6. Implementation

**Data points verified**

All issues that address the Socio-Environmental Monitoring System for the cattle livestock farms are annually audited by a third party

**Verification standard**

Third party audit. According to NBC TSC 4.400, specific Standard for Pre-Agreed Works

**Please explain**

The cattle procurement operations and the entire monitoring system of suppliers are audited annually and independently. The

---

standard used was adopted by agreement between the stakeholders of the public Livestock agreement.. The independent audits reveal that, since 2013, more than 99% of JBS cattle purchases from farms located in the Amazon region complied with the company's social and environmental criteria and with its agreement with the commitment, called the "Public Livestock Commitment". In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers, in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL, recognized worldwide for socio-environmental audit work.

---

#### **Disclosure module**

SF. Supply chain module

#### **Data points verified**

All issues that address the Socio-Environmental Monitoring System for the cattle livestock farms are annually audited by a third party

#### **Verification standard**

Third party audit. According to NBC TSC 4.400, specific Standard for Pre-Agreed Works.

#### **Please explain**

The cattle procurement operations and the entire monitoring system of suppliers are audited annually and independently. The standard used was adopted by agreement between the stakeholders of the public Livestock agreement.. The independent audits reveal that, since 2013, more than 99% of JBS cattle purchases from farms located in the Amazon region complied with the company's social and environmental criteria and with its agreement with the commitment, called the "Public Livestock Commitment". In 2018, JBS reached 100% of socio-environmental compliance, its best indicator since it passed to audit the cattle acquisitions of Amazonian suppliers, in 2014, in compliance with the Public Commitment of Livestock. The data were evaluated by independent auditing firm DNV GL, recognized worldwide for socio-environmental audit work.

---

## **F9. Barriers and challenges**

---

### **F9.1**

---

**(F9.1) Describe the key barriers or challenges to avoiding forests-related risks in your direct operations or in other parts of your value chain.**

#### **Forest risk commodity**

Timber

#### **Coverage**

Supply chain

#### **Primary barrier/challenge type**

Limited public awareness and/or market demand

#### **Comment**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements. However, we believe that government agencies cooperation in the periodic provision of farms' information regarding land and environmental compliance in the country is a key factor in struggling deforestation practices of the supply chain. The results of the Zero Deforestation initiative are closely linked to the availability of data, since this information needs to be in an operational form, up-to-date and sufficient for companies to carry out their supply chain management. Another relevant point is that sustainability can be noticed as a differential factor, since frigorific and companies retailers that are committed to deforestation-free production will be enabled in this market.

---

#### **Forest risk commodity**

Cattle Products

#### **Coverage**

Direct operations

Supply chain

#### **Primary barrier/challenge type**

Limited public awareness and/or market demand

---

**Comment**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. However, we believe that government agencies cooperation in the periodic provision of farms` information regarding land and environmental compliance in the country is a key factor in struggling deforestation practices of the supply chain. After the approval of Brazilian Forest Code new version, in 2012, and the regulation of the Rural Environmental Registry - CAR (2014), it is expected in the coming years a large movement of environmental regulation in the country, which should result in a consolidation of environmental legislation and a massive movement for the reforestation of degraded areas, which should facilitate companies` mechanisms to obtain information from their supply chain. Other very important issue that probably will be discussed along the environmental regularization of rural properties is the adoption of best agricultural practices, aiming to increase productivity and reach a production model more responsible. Regarding the commitments made by JBS such as zero deforestation and agreements with Federal Public Prosecution Office (MPF), is important and required that other companies also make these commitments, ensuring that whole cattle supply chain stay in compliance with social and environmental criteria established. While there are companies that buy from suppliers who work illegally, there will still be a market barrier to ban unsustainable practices To achieve the control regarding indirect cattle supply, it is necessary an evolving discussion with government agencies to develop public mechanisms or platforms with sufficient and accessible information, which allows the animal traceability. In this way, large supermarkets are joining the Public Livestock commitment in order to ensure that their customers are getting beef that meet social and environmental production criteria. This is a very important moment because the retail / wholesale are great negotiators and relate directly to consumers.

---

**Forest risk commodity**

Soy

**Coverage**

Supply chain

**Primary barrier/challenge type**

Limited public awareness and/or market demand

**Comment**

In general, it is possible to see the efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements. However, we believe that government agencies cooperation in the periodic provision of farms` information regarding land and environmental compliance in the country is a key factor in struggling deforestation practices of the supply chain. The results of the Zero Deforestation initiative are closely linked to the availability of data, since this information needs to be in an operational form, up-to-date and sufficient for companies to carry out their supply chain management. Another relevant point is that sustainability can be noticed as a differential factor, since frigorific and companies retailers that are committed to deforestation-free production will be enabled in this market.

---

**F9.2**

---

**(F9.2) Describe the main measures that would improve your organization’s ability to manage forests-related risks.**

**Forest risk commodity**

Timber

**Coverage**

Supply chain

**Main measure**

Development of certification and sustainability standards

**Comment**

Environmental and development agencies strengthening for improvements on control and awareness. As well public programs on the supply chain to recognize, create better commercial conditions e demand for certified products.

---

**Forest risk commodity**

Cattle Products

**Coverage**

Supply chain

**Main measure**

Development of certification and sustainability standards

**Comment**

The participation of retail companies (supermarkets) and other customers is vital for the commitment off zero deforestation in the livestock chain, siince the requirement - of this important link in the value chain of beef – for deforestation-free products will stimulate the maintenance and new adhesions to the existing commitments. The lack of government policies for the environmental regularization of properties with environmental liabilities, in addition to governmental incentives policies for forest conservation, generates a significant number of suppliers "excluded" from the value chain of Brazilian livestock. Since rural properties with environmental liabilities, in some cases, have difficulty to find legal ways for environmental regulation. JBS has been working with the Federal Government and State Governments, as well as NGOs and the Working Group on Sustainable Livestock (GTPS). This work aims to enable alternatives in the environmental regularization of rural properties in disagreement with the company's purchasing policy, since the government Brazilian law did not provide legal tools for environmental regulation - only a few states have evolved into effective and fast-response programs. With the new Brazilian Forest Code approval and Rural Environmental Registry (CAR - georeferenced map of rural property that contains its geographical boundaries and definition of land uses - productive area and preservation) regulation, will be created a rich database of farms in Brazil. With the availability of this information, companies can have a better management of supply chains monitoring in the country, particularly for soybeans and cattle.

---

**Forest risk commodity**

Soy

**Coverage**

Supply chain

**Main measure**

Development of certification and sustainability standards

**Comment**

With the new Brazilian Forest Code approval and Rural Environmental Registry (CAR - georeferenced map of rural property that contains its geographical boundaries and definition of land uses - productive area and preservation) regulation, will be created a rich database of farms in Brazil. With the availability of this information, companies can have a better management of supply chains monitoring in the country, particularly for soybeans and cattle.

---

**F18. Signoff**

---

F-FI

---

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

### F18.1

---

**(F18.1) Provide the following information for the person that has signed off (approved) your CDP forests response.**

	Job Title	Corresponding job category
Row 1		Please select

### SF. Supply chain module

---

#### SF0.1

---

**(SF0.1) What is your organization's annual revenue for the reporting period?**

	Annual revenue
Row 1	181680200000

#### SF0.2

---

**(SF0.2) Do you have an ISIN for your organization that you are willing to share with CDP?**

Yes

#### SF0.2a

---

**(SF0.2a) Please share your ISIN in the table below.**

	ISIN country code	ISIN numeric identifier (including single check digit)
Row 1	BR	JBSSACNOR8

#### SF1.1

---

**(SF1.1) On F6.4 you were asked "Do you specify any third-party certification schemes for your disclosed commodity(ies)? Indicate the volume and percentage of your production and/or consumption covered". Can you also indicate, for each of your disclosed commodity(ies), the percentage of certified volume sold to each requesting CDP supply chain member?**

Yes

#### SF1.1a

---

**(SF1.1a) For each of your requesting CDP supply chain members, indicate the percentage of certified volume sold per disclosed commodity(ies).**

**Requesting member**

Arcos Dorados

**Forest risk commodity**

Cattle Products

**Form of commodity**

Beef

**Third-party certification scheme**

Other, please specify (Responsible Sourcing Policy and Public Livestock Commitment)

**Total volume of commodity sold to member**

9639.5

**Metric**

Other, please specify (tonnes)

**What % of the volume reported in column 5 is certified?**

100%

**Comment**

JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor.

---

**Requesting member**

Arcos Dorados

**Forest risk commodity**

Soy

**Form of commodity**

Other, please specify (Feeding pork and chicken in animal diets)

**Third-party certification scheme**

Other, please specify (Soy Moratorium)

**Total volume of commodity sold to member**

28065.7

**Metric**

Other, please specify (tonnes)

**What % of the volume reported in column 5 is certified?**

100%

**Comment**

The reported volume refers to the final product (animal protein) sold by JBS to the customer. JBS (Seara) uses soy to manufacture animal feed, which is used in farms of poultry and pork. The company only purchases soy from suppliers that signed the Soy Moratorium - for supplier located in the Legal Amazon States. Thus, 100% of JBS soy suppliers, in Brazil and located in the Legal Amazon, are in compliance with Soy Moratorium criteria.

---

**Requesting member**

Restaurant Brands International

**Forest risk commodity**

Cattle Products

**Form of commodity**

Beef

**Third-party certification scheme**

Other, please specify (Responsible Sourcing Policy and Public Livestock Commitment)

**Total volume of commodity sold to member**

13661.1

**Metric**

Other, please specify (tonnes)

**What % of the volume reported in column 5 is certified?**

100%

**Comment**

JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor.

---

**Requesting member**

Restaurant Brands International

**Forest risk commodity**

Soy

**Form of commodity**

Other, please specify (Feeding pork and chicken-in animal diets)

**Third-party certification scheme**

Other, please specify (Soy Moratorium)

**Total volume of commodity sold to member**

4652.2

**Metric**

Other, please specify (tonnes)

**What % of the volume reported in column 5 is certified?**

100%

**Comment**

The reported volume refers to the final product (animal protein) sold by JBS to the customer. JBS (Seara) uses soy to manufacture animal feed, which is used in farms of poultry and pork. The company only purchases soy from suppliers that signed the Soy Moratorium - for supplier located in the Legal Amazon States. Thus, 100% of JBS soy suppliers, in Brazil and located in the Legal Amazon, are in compliance with Soy Moratorium criteria.

---

**Requesting member**

McDonald's Corporation

**Forest risk commodity**

Cattle Products

**Form of commodity**

Beef

**Third-party certification scheme**

Other, please specify (Responsible Sourcing Policy and Public Livestock Commitment)

**Total volume of commodity sold to member**

9665.2

**Metric**

Other, please specify (tonnes)

**What % of the volume reported in column 5 is certified?**

100%

**Comment**

JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labour.

---

**Requesting member**

McDonald's Corporation

**Forest risk commodity**

Soy

---

**Form of commodity**

Other, please specify (Feeding pork and chicken-in animal diets)

**Third-party certification scheme**

Other, please specify (Soy Moratorium)

**Total volume of commodity sold to member**

9665.2

**Metric**

Other, please specify (tonnes)

**What % of the volume reported in column 5 is certified?**

100%

**Comment**

The reported volume refers to the final product (animal protein) sold by JBS to the customer. JBS (Seara) uses soy to manufacture animal feed, which is used in farms of poultry and pork. The company only purchases soy from suppliers that signed the Soy Moratorium - for supplier located in the Legal Amazon States. Thus, 100% of JBS soy suppliers, in Brazil and located in the Legal Amazon, are in compliance with Soy Moratorium criteria.

---

**Requesting member**

Walmart - Brasil

**Forest risk commodity**

Cattle Products

**Form of commodity**

Beef

**Third-party certification scheme**

Other, please specify (Responsible Sourcing Policy and Public Livestock Commitment)

**Total volume of commodity sold to member**

22969

**Metric**

Other, please specify (tonnes)

**What % of the volume reported in column 5 is certified?**

100%

**Comment**

JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labour.

---

**Requesting member**

Walmart - Brasil

**Forest risk commodity**

Soy

**Form of commodity**

Other, please specify (Feeding pork and chicken-in animal diets)

**Third-party certification scheme**

Other, please specify (Soy Moratorium)

**Total volume of commodity sold to member**

18577

**Metric**

Other, please specify (tonnes)

**What % of the volume reported in column 5 is certified?**

100%

**Comment**

The reported volume refers to the final product (animal protein) sold by JBS to the customer. JBS (Seara) uses soy to manufacture animal feed, which is used in farms of poultry and pork. The company only purchases soy from suppliers that signed the Soy Moratorium - for supplier located in the Legal Amazon States. Thus, 100% of JBS soy suppliers, in Brazil and located in the Legal Amazon, are in compliance with Soy Moratorium criteria.

---

## SF2.1

---

**(SF2.1) Please propose any mutually beneficial forests-related projects you could collaborate on with specific CDP supply chain members.**

**Requesting member**

Arcos Dorados

**Commodity related to the project**

Cattle Products

**Category of project**

Relationship sustainability assessment

**Type of project**

Other relationship sustainability assessment projects, please specify (Social Environmental Monitoring System)

**Estimated timeframe for realization of benefits to customer**

1-3 years

**Details of project**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. However, we believe all companies in the beef value chain must take on sustainable purchasing policies, once it is a key factor in struggling deforestation practices of the supply chain. Regarding to the commitments made by JBS such as zero deforestation, is important and require that other companies also make these commitments, ensuring that whole cattle supply chain stay in compliance with social and environmental criteria established. While there are companies that buy from suppliers who work illegally, there will still be a market barrier to ban unsustainable practices.

**Projected outcome**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. To ensure compliance with the JBS's commitments, an independent party audits the System annually. According to the independent audit results of the last four years, all above 99%. In 2018, JBS achieved 100% social and environmental compliance, the results of the audit are available on JBS official website (<http://www.jbs.com.br>). For partner companies, there will be the benefit of ensuring that raw materials are sourced in a sustainable manner.

---

**Requesting member**

Arcos Dorados

**Commodity related to the project**

Cattle Products

**Category of project**

Provision of goods and services

**Type of project**

Other provision of goods/services projects, please specify (Supplier Environmental Regularization Project)

**Estimated timeframe for realization of benefits to customer**

1-3 years

**Details of project**

Encouraging the adoption of property management practices, aiming at increasing productivity, coupled with socio-environmental criteria for property management and commodity production. The development of a program of environmental regularization of properties with environmental liabilities is essential. The initiative can be a partnership between companies, in line with rules approved by the Federal Public Prosecution Service, with the objective of regulating suppliers / properties with social and environmental criteria. Another important objective is the recovery of degraded pastures and the technical qualification of producers' management of property and production, aiming at increasing productivity - which avoids the opening of new areas for agricultural

---

production.

#### **Projected outcome**

The environmental regularization of properties will enable an important socio-environmental action, as it will allow blocked producers to re-negotiate their production with companies (moving the local economy and environmental preservation). The increase in productivity generates benefits for the producer who will have higher income in a smaller area and also avoids the opening of new areas for agricultural production.

---

#### **Requesting member**

Restaurant Brands International

#### **Commodity related to the project**

Cattle Products

#### **Category of project**

Relationship sustainability assessment

#### **Type of project**

Other relationship sustainability assessment projects, please specify (Social Environmental Monitoring System)

#### **Estimated timeframe for realization of benefits to customer**

1-3 years

#### **Details of project**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. However, we believe all companies in the beef value chain must take on sustainable purchasing policies, once it is a key factor in struggling deforestation practices of the supply chain. Regarding to the commitments made by JBS such as zero deforestation, is important and require that other companies also make these commitments, ensuring that whole cattle supply chain stay in compliance with social and environmental criteria established. While there are companies that buy from suppliers who work illegally, there will still be a market barrier to ban unsustainable practices.

#### **Projected outcome**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. To ensure compliance with the JBS's commitments, an independent party annually audits the System. According to the independent audit results of the last four years, all above 99%. In 2018, JBS achieved 100% social and environmental compliance, the results of the audit are available on JBS official website (<http://www.jbs.com.br>). For partner companies, there will be the benefit of ensuring that the raw materials are sourced sustainably.

---

#### **Requesting member**

Restaurant Brands International

#### **Commodity related to the project**

Cattle Products

#### **Category of project**

Provision of goods and services

#### **Type of project**

Other provision of goods/services projects, please specify (Supplier Environmental Regularization Project)

#### **Estimated timeframe for realization of benefits to customer**

1-3 years

#### **Details of project**

Encouraging the adoption of property management practices, aiming at increasing productivity, coupled with socio-environmental criteria for property management and commodity production. The development of a program of environmental regularization of properties with environmental liabilities is essential. The initiative can be a partnership between companies, in line with rules approved by the Federal Public Prosecution Service, with the objective of regulating suppliers / properties with social and environmental criteria. Another important objective is the recovery of degraded pastures and the technical qualification of producers' management of property and production, aiming at increasing productivity - which avoids the opening of new areas for agricultural production.

#### **Projected outcome**

The environmental regularization of properties will enable an important socio-environmental action, as it will allow blocked producers to re-negotiate their production with companies (moving the local economy and environmental preservation). Increased

---

productivity generates benefits for the producer who will have higher income in a smaller area and also avoids the opening of new areas for agricultural production.

---

**Requesting member**

McDonald's Corporation

**Commodity related to the project**

Cattle Products

**Category of project**

Relationship sustainability assessment

**Type of project**

Other relationship sustainability assessment projects, please specify (Social Environmental Monitoring System)

**Estimated timeframe for realization of benefits to customer**

1-3 years

**Details of project**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. However, we believe all companies in the beef value chain must take on sustainable purchasing policies, once it is a key factor in struggling deforestation practices of the supply chain. Regarding to the commitments made by JBS such as zero deforestation, is important and require that other companies also make these commitments, ensuring that whole cattle supply chain stay in compliance with social and environmental criteria established. While there are companies that buy from suppliers who work illegally, there will still be a market barrier to ban unsustainable practices.

**Projected outcome**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. To ensure compliance with the JBS's commitments, an independent party annually audits the System. According to the independent audit results of the last four years, all above 99%. In 2018, JBS achieved 100% social and environmental compliance, the results of the audit are available on JBS official website (<http://www.jbs.com.br>). For partner companies, there will be the benefit of ensuring that the raw materials are sourced sustainably.

---

**Requesting member**

McDonald's Corporation

**Commodity related to the project**

Cattle Products

**Category of project**

Provision of goods and services

**Type of project**

Other provision of goods/services projects, please specify (Supplier Environmental Regularization Project)

**Estimated timeframe for realization of benefits to customer**

1-3 years

**Details of project**

Encouraging the adoption of property management practices, aiming at increasing productivity, coupled with socio-environmental criteria for property management and commodity production. The development of a program of environmental regularization of properties with environmental liabilities is essential. The initiative can be a partnership between companies, in line with rules approved by the Federal Public Prosecution Service, with the objective of regulating suppliers / properties with social and environmental criteria. Another important objective is the recovery of degraded pastures and the technical qualification of producers' management of property and production, aiming at increasing productivity - which avoids the opening of new areas for agricultural production.

**Projected outcome**

The environmental regularization of properties will enable an important socio-environmental action, as it will allow blocked producers to re-negotiate their production with companies (moving the local economy and environmental preservation). Increased productivity generates benefits for the producer who will have higher income in a smaller area and also avoids the opening of new areas for agricultural production.

---

**Requesting member**

Walmart - Brasil

---

**Commodity related to the project**

Cattle Products

**Category of project**

Relationship sustainability assessment

**Type of project**

Other relationship sustainability assessment projects, please specify (Social Environmental Monitoring System)

**Estimated timeframe for realization of benefits to customer**

1-3 years

**Details of project**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. However, we believe all companies in the beef value chain must take on sustainable purchasing policies, once it is a key factor in struggling deforestation practices of the supply chain. Regarding to the commitments made by JBS such as zero deforestation, is important and require that other companies also make these commitments, ensuring that whole cattle supply chain stay in compliance with social and environmental criteria established. While there are companies that buy from suppliers who work illegally, there will still be a market barrier to ban unsustainable practices.

**Projected outcome**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers. To ensure compliance with the JBS's commitments, an independent party annually audits the System. According to the independent audit results of the last four years, all above 99%. In 2018, JBS achieved 100% social and environmental compliance, the results of the audit are available on JBS official website (<http://www.jbs.com.br>). For partner companies, there will be the benefit of ensuring that the raw materials are sourced sustainably.

---

**Requesting member**

Walmart - Brasil

**Commodity related to the project**

Cattle Products

**Category of project**

Provision of goods and services

**Type of project**

Other provision of goods/services projects, please specify (Supplier Environmental Regularization Project)

**Estimated timeframe for realization of benefits to customer**

1-3 years

**Details of project**

Encouraging the adoption of property management practices, aiming at increasing productivity, coupled with socio-environmental criteria for property management and commodity production. The development of a program of environmental regularization of properties with environmental liabilities is essential. The initiative can be a partnership between companies, in line with rules approved by the Federal Public Prosecution Service, with the objective of regulating suppliers / properties with social and environmental criteria. Another important objective is the recovery of degraded pastures and the technical qualification of producers' management of property and production, aiming at increasing productivity - which avoids the opening of new areas for agricultural production.

**Projected outcome**

The environmental regularization of properties will enable an important socio-environmental action, as it will allow blocked producers to re-negotiate their production with companies (moving the local economy and environmental preservation). Increased productivity generates benefits for the producer who will have higher income in a smaller area and also avoids the opening of new areas for agricultural production.

---

**SF2.2**

**(SF2.2) Have requests or initiatives by CDP supply chain members prompted your organization to take organizational-level action to reduce or remove deforestation/forest degradation from your operations or your supply chain?**

Yes

## SF2.2a

---

**(SF2.2a) Specify the requesting CDP supply chain member(s) that have driven organizational-level action to reduce or remove deforestation/forest degradation from your operations or your supply chain and provide details on how.**

**Requesting member**

Arcos Dorados

**Category of project**

Policy and commitments

**Type of project**

<Not Applicable>

**Description of the project/initiative**

Sustainable Meat Project: the new approach to the purchase of meat produced in the Amazon region, in accordance with defined socio-environmental criteria, is positive and opens up numerous opportunities for local development, increased productivity and environmental regularization of beef cattle farms.

**Give an indication of the metric of success for the initiative**

100% of product supply meets sustainability policies and commitments (deforestation).

**Would you be happy for CDP supply chain members to highlight this work in their external communication?**

Yes

---

**Requesting member**

McDonald's Corporation

**Category of project**

Policy and commitments

**Type of project**

<Not Applicable>

**Description of the project/initiative**

Sustainable Meat Project: the new approach to the purchase of meat produced in the Amazon region, in accordance with defined socio-environmental criteria, is positive and opens up numerous opportunities for local development, increased productivity and environmental regularization of beef cattle farms.

**Give an indication of the metric of success for the initiative**

100% of product supply meets sustainability policies and commitments (deforestation).

**Would you be happy for CDP supply chain members to highlight this work in their external communication?**

Yes

---

**Requesting member**

Restaurant Brands International

**Category of project**

Policy and commitments

**Type of project**

<Not Applicable>

**Description of the project/initiative**

Sustainable Meat Project: the new approach to the purchase of meat produced in the Amazon region, in accordance with defined socio-environmental criteria, is positive and opens up numerous opportunities for local development, increased productivity and environmental regularization of beef cattle farms.

**Give an indication of the metric of success for the initiative**

100% of product supply meets sustainability policies and commitments (deforestation).

---

**Would you be happy for CDP supply chain members to highlight this work in their external communication?**

Yes

---

**Requesting member**

Walmart - Brasil

**Category of project**

Policy and commitments

**Type of project**

<Not Applicable>

**Description of the project/initiative**

Sustainable Meat Project: the new approach to the purchase of meat produced in the Amazon region, in accordance with defined socio-environmental criteria, is positive and opens up numerous opportunities for local development, increased productivity and environmental regularization of beef cattle farms.

**Give an indication of the metric of success for the initiative**

100% of product supply meets sustainability policies and commitments (deforestation).

**Would you be happy for CDP supply chain members to highlight this work in their external communication?**

Yes

---

**Submit your response**

---

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

English

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

	Public or Non-Public Submission	I am submitting to	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Public	Investors Customers	Yes, submit Supply Chain Questions now

**Please confirm below**

I have read and accept the applicable Terms