

F0. Introduction

F0.1

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

Minerva Foods is a publicly traded Brazilian company with a global presence, exporting its products to more than 100 countries on five continents. At the end of 2022, the company's net revenue was R\$31.0 billion, with an Adjusted EBITDA of R\$3.1 billion and a net profit of R\$655.1 million.

Its operations encompass the processing and sales of animal protein and by-products, in addition to operating in the carbon credits market through its subsidiary, MyCarbon, and the energy sector in Brazil.

The Company is the leader in beef exports in South America with a market share of approximately 20%. In 2022, produced and processed 1,223.7 thousand tons of beef in the region. Minerva Foods also has a workforce of more than 23,000 employees in South America and Australia. The Company obtain, processes, and markets animal protein through an integrated, geographically diversified and flexible business platform, which includes 32 industrial units (slaughter, deboning, and processing) in Brazil, Argentina, Colombia, Paraguay, Uruguay, and Australia. Completing its operations are 14 own and outsourced distribution centers in South America (11 in Brazil, 1 in Chile, 1 in Argentina, 1 in Colombia, and 1 in Paraguay), as well as 12 international commercial offices (Algeria, Australia, Chile, China, Egypt, United Arab Emirates, United States, Italy, Lebanon, United Kingdom, Russia, and Taiwan). Moreover, we operate one food processing plant in Brazil (Minerva Foods Industrializados) and two facilities under the Swift brand in Argentina.

For the purposes of this questionnaire, the information will be presented globally and highlighting local specificities, when necessary or to exemplify actions in practice. The information will be reported as follows: Minerva Foods Brasil (includes operations and management in the Brazilian territory) and Minerva Foods Latam (includes operations and management in the territories of Argentina, Colombia, Paraguay and Uruguay). It is important to mention that Minerva Foods acquired, in 2021 and 2022, 4 sheep slaughtering units in Australia, which only started operating in the second half of 2022. Although they are mentioned in the operational structure, the operations in Australia do not have all of their socio-environmental indicators consolidated, due to the process of structuring and standardizing the Company's management that is being carried out in the country. Moreover, the units in Australia represented less than 5% of the company's total revenue in 2022.

Starting a new chapter in our 30-year history, in 2021, Minerva Foods updated its brand to reflect the evolution that has made Minerva Foods a modern, disruptive, and innovative business, committed to creating a sustainable food future for our planet. Minerva Foods is deeply committed to sustainability in such a way that this value is embedded in its institutional culture. With the aim of prioritizing and optimizing initiatives and investments and generating strategic partnerships, Minerva Foods' ESG agenda (environmental, social and corporate governance) was organized around three pillars: Dedication to the Planet, Prosperity of Our People and Product Quality and Respect for life.

In April 2021, Minerva Foods publicly disclosed its Commitment to Sustainability focused on the environmental pillar 'Dedication to the Planet'. The commitment aims to achieve zero net emissions by 2035 – 15 years ahead of the Paris Agreement – for the Company's operations. For this purpose, the Company has set a series of goals focused on combating illegal deforestation in the value chain and climate change.

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 2022	December 31 2022

F0.3

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

BRL

F0.4

**(F0.4) Select the forest risk commodity(ies) that you are, or are not, disclosing on (including any that are sources for your processed ingredients or manufactured goods); and for each select the stages of the supply chain that best represents your organization's area of operation.**

## Timber products

### Commodity disclosure

Disclosing

### Stage of the value chain

Processing

### Are you disclosing information on embedded commodities?

No, because we have no embedded commodities

### Explanation if not disclosing

<Not Applicable>

## Palm oil

### Commodity disclosure

This commodity is not produced, sourced or used by our organization

### Stage of the value chain

<Not Applicable>

### Are you disclosing information on embedded commodities?

<Not Applicable>

### Explanation if not disclosing

<Not Applicable>

## Cattle products

### Commodity disclosure

Disclosing

### Stage of the value chain

Processing

Trading

### Are you disclosing information on embedded commodities?

No, because we have no embedded commodities

### Explanation if not disclosing

<Not Applicable>

## Soy

### Commodity disclosure

This commodity is not produced, sourced or used by our organization

### Stage of the value chain

<Not Applicable>

### Are you disclosing information on embedded commodities?

<Not Applicable>

### Explanation if not disclosing

<Not Applicable>

## Other - Rubber

### Commodity disclosure

This commodity is not produced, sourced or used by our organization

### Stage of the value chain

<Not Applicable>

### Are you disclosing information on embedded commodities?

<Not Applicable>

### Explanation if not disclosing

<Not Applicable>

## Other - Cocoa

### Commodity disclosure

This commodity is not produced, sourced or used by our organization

### Stage of the value chain

<Not Applicable>

### Are you disclosing information on embedded commodities?

<Not Applicable>

### Explanation if not disclosing

<Not Applicable>

**Other - Coffee**

**Commodity disclosure**

This commodity is not produced, sourced or used by our organization

**Stage of the value chain**

<Not Applicable>

**Are you disclosing information on embedded commodities?**

<Not Applicable>

**Explanation if not disclosing**

<Not Applicable>

**F0.5**

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**(F0.5) Select the option that describes the reporting boundary for which forests-related impacts on your business are being reported**

Operational control

**F0.6**

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**(F0.6) Select the countries/areas in which you operate.**

Argentina  
Australia  
Brazil  
Colombia  
Paraguay  
Uruguay

**F0.7**

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**(F0.7) Are there any parts of your direct operations or supply chain that are not included in your disclosure?**

Yes

**F0.7a**

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**(F0.7a) Identify the parts of your direct operations or supply chain that are not included in your disclosure.**

**Forest risk commodity**

Cattle products

**Value chain stage**

Supply chain

**Exclusion**

Specific supplier(s)

**Description of exclusion**

The greatest challenge in advancing the monitoring of indirect supplying farms is related to the lack of access to, or even the absence of, official data to verify other levels of the value chain. Additionally, monitoring requires not only investment in tools but also the engagement of the entire value chain to ensure complete traceability of cattle. Despite the challenges, which are common throughout the entire chain, achieving traceability of indirect suppliers represents another pioneering initiative by Minerva Foods, in collaboration with various players in the meat industry in Brazil and other Latin American countries with operations. The aim is to seek greater transparency and security in the cattle origination process. It is also essential to mention that the Company actively participates in the Working Group of Indirect Suppliers (GTFI), which brings together various stakeholders in the beef production chain in Brazil to address the issue of indirect suppliers and identify potential traceability, monitoring, and transparency solutions with a focus on controlling deforestation in such areas.

**% of volume excluded**

Don't know

**Potential for forests-related risk**

Potential for forests-related risk, evaluated, but not disclosing to CDP

**Please explain**

To address the challenge of monitoring indirect supplying farms, Minerva Foods has set a goal in its Commitment to Sustainability to establish a program for this purpose and apply the criterion of zero illegal deforestation in the purchase of animals, including indirect suppliers, by 2030.

Pioneering in the sector, the Company has begun testing and integrating a complementary traceability and monitoring tool for indirect suppliers in the Amazon into its internal systems, called Visipeç®. The tool combines information from the Rural Environmental Registry (CAR) of the property with public databases, where available, to monitor the movement of cattle throughout their production cycle. Visipeç® was developed by the National Wildlife Federation (NWF) in partnership with the Gibbs - Land-Use and Environment Lab at the University of Wisconsin-Madison, and it is currently managed by the NWF. Testing with the tool has shown more than 98% compliance with the good practice criteria defined by the Working Group of Indirect Suppliers (GTFI). It is worth mentioning that the tool is currently structured to relate direct suppliers with indirect suppliers of level 1. However, studies and analyses are being conducted to explore the possibility and needs for the tool to encompass other levels of the supply chain.

In addition, Minerva Foods has taken the next step in advancing the engagement of the entire livestock chain by transferring monitoring technology. This is the objective of the SMGeo Prospec® application, developed in partnership with the company Niceplanet Geotechnology, which is making the tool available to rural producers throughout Brazil, enabling them to verify compliance within their supply chain. The application allows producers to conduct detailed research, access socio-environmental compliance histories and analyses, and map risks before engaging in any commercial activities.

Minerva Foods has been focusing its efforts on training its direct suppliers on the importance of using the tool through workshops, field visits, and providing guidance materials. The Company actively participates in working groups that discuss this topic. So far, Minerva Foods has distributed more than 800 free vouchers for the application's usage.

**F0.8**

**(F0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.?)**

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	BEEF3 – Brazilian Stock Exchange (B3) ISIN BEEF3
Yes, a Ticker Symbol	BEEF3 – Brazilian Stock Exchange (B3)
Yes, an ISIN code	ISIN Bonds 28: US603374AE94 31: US603374AF69

**F1. Current state**

**F1.1**

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

## Timber products

### Activity

Using as input into manufacturing process for power generation

### Form of commodity

Hardwood logs  
Softwood logs

### Source

Smallholders  
Single contracted producer  
Multiple contracted producers  
Trader/broker/commodity market

### Country/Area of origin

Brazil  
Paraguay  
Uruguay

### % of procurement spend

1-5%

### Comment

The core activity of Minerva Foods revolves around the production of fresh beef and lamb, along with their by-products. The company distributes chilled and frozen fresh meats domestically and internationally, as well as processed products derived from cooked, roasted, and grilled meats. Certain processes within the production require hot water to maintain equipment and utensil sterilization, as well as the cooking of by-products. Steam generation is essential to ensure the sterilization and non-contamination of the products. In Minerva Foods' production units, logs serve as the primary fuel for steam production. Exotic species such as eucalyptus, as well as native species specific to the region, are utilized.

Minerva Foods Brazil: In its Brazilian operations, the company mandates that all suppliers of native firewood present the Document of Forestry Origin (DOF) as per Ordinance MMA No. 253, dated August 18, 2006. The DOF serves as a mandatory license for transporting and storing forest products of native origin, including native charcoal. All wood extracted within the national territory must be certified and accompanied by the Document of Forest Origin (DOF) established by Ordinance MMA No. 253, dated August 18, 2006. Suppliers of exotic species such as eucalyptus, rubber trees, or orange trees are required to provide a certificate of regularity issued by IBAMA.

Minerva Foods Latam: In the Latam operations, a document authorizing the cutting, sale, and transport of firewood is required. In Uruguay, the legislation (Lei de Desarrollo Forestal N° 15.939) recommends that firewood sellers (eucalyptus) hold a "Sociedad" registration, similar to a CNPJ, which ensures the avoidance of purchasing from indigenous or preserved areas. For the Paraguay plants, all firewood used is eucalyptus, and according to Law 422/73, the providers must be registered with the National Forestry Institute (Instituto Forestal Nacional), guaranteeing that the firewood is not sourced from preserved areas.

Minerva Foods Australia: Wood is not utilized as a fuel in the boilers of the industrial units in Australia.

## Cattle products

### Activity

Slaughtering

### Form of commodity

Cattle  
Tallow  
Beef  
Hides/leather  
Tallow biodiesel

### Source

Smallholders  
Single contracted producer  
Multiple contracted producers  
Trader/broker/commodity market

### Country/Area of origin

Argentina  
Australia  
Brazil  
Colombia  
Paraguay  
Uruguay

### % of procurement spend

81-90%

### Comment

Minerva Foods is primarily engaged in the production of fresh beef and lamb, as well as meat products. The company operates through an integrated, geographically diversified, and flexible business platform, consisting of 32 industrial units. Its core activities involve the sourcing, processing, and marketing of animal protein. Minerva Foods distributes chilled and frozen fresh meats and offers a range of processed products derived from cooked, roasted, and grilled meats, catering to both domestic and international markets.

Additionally, Minerva Foods operates in the bovine leather processing and distribution segment, dealing with wet blue and semi-finished leather products. The company also produces natural casings used in sausage manufacturing and engages in the production of biodiesel from bovine tallow, a by-product of its primary processes. Furthermore, Minerva Foods is active in the live cattle export sector, adhering to the highest international animal welfare standards and committing to sustainable livestock development initiatives.

## 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.**

	% of revenue dependent on commodity	Comment
Timber products	71-80%	Minerva Foods relies on firewood as a primary fuel source to generate steam for heating water in various operations, including cleaning rooms, sterilizers, and equipment. Sterilization is crucial to prevent any form of product contamination, making firewood an essential commodity for the smooth functioning of the company's operations. Firewood is used in industrial operations across Brazil, Paraguay, and Uruguay.  The dependency on firewood is measured by the revenue generated from products in the countries where firewood is utilized, divided by the company's total revenue. Based on this calculation, Minerva Foods exhibits a dependency of 74% on firewood in relation to its total revenue. This highlights the significance of firewood as a critical resource for the company's overall operations.
Palm oil	<Not Applicable>	<Not Applicable>
Cattle products	100%	Minerva Foods is primarily engaged in the production of fresh beef and lamb, along with meat products. The company's core activity revolves around the processing and distribution of animal protein. Additionally, the company operates in the processing and distribution of bovine leather in the wet blue and semi-finished states, as well as natural casings for sausage manufacturing. The company also produces biodiesel from bovine tallow, a by-product of its primary processes.  Furthermore, Minerva Foods has a presence in the live cattle export sector, adhering to stringent international animal welfare standards and committing to sustainable livestock development initiatives. The revenue generated from these activities represents 100% dependence on the company's overall revenue. This underscores the significant contribution of these operations to the company's overall financial performance.
Soy	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>
Other - Cocoa	<Not Applicable>	<Not Applicable>
Other - Coffee	<Not Applicable>	<Not Applicable>

## F1.5

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

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

## F1.5a

**(F1.5a) Disclose your production and/or consumption figure, and the percentage of commodity volumes verified as deforestation- and/or conversion-free.**

**Forest risk commodity**

Cattle products

**Data type**

Consumption data

**Commodity production/ consumption volume**

3752961

**Metric for commodity production/ consumption volume**

Other, please specify (Total units of cattle slaughtered.)

**Data coverage**

Full commodity production/consumption

**Have any of your reported commodity volumes been verified as deforestation- and/or conversion-free?**

Yes

**% of reported volume verified as deforestation- and/or conversion-free**

74

**Please explain**

The reported commodity production volume refers to the total units of cattle slaughtered in the following countries:

Brazil: 1,719,792 units

Argentina: 458,167 units

Colombia: 292,116 units

Paraguay: 834,532 units

Uruguay: 448,354 units

Minerva Foods Brasil: Minerva Foods Brasil ensures that 100% of its direct supplier farms are monitored through a geospatial monitoring platform with georeferenced maps. This robust monitoring system guarantees zero illegal deforestation throughout the territory. The company is committed to maintaining transparency and sustainability in its supply chain by closely monitoring its suppliers' activities and ensuring compliance with environmental regulations.

Minerva Foods Latam: In Paraguay, Minerva Foods continues to monitor 100% of its direct supplier farms using the geospatial monitoring platform, which includes georeferenced maps. This comprehensive monitoring system ensures that there is no illegal deforestation within the territory. In Argentina, the company has achieved over 90% direct supplier monitoring in 2022, and in Colombia, it has reached 80% direct supplier monitoring. Minerva Foods has also begun studying the socio-environmental legislation in Uruguay to assess the local risks and initiate the monitoring of its direct suppliers.

In line with Minerva Foods' Commitment to Sustainability announced in April 2021, the company successfully completed the geographical monitoring of 100% of its direct suppliers in Paraguay in 2021. The company aims to achieve the same level of monitoring for its operations in Colombia by 2023, Uruguay by 2025, and other South American countries by 2030. This commitment also extends to monitoring indirect suppliers throughout South America by the same date.

Furthermore, Minerva Foods conducts an annual third-party audit on sales in Brazil and Paraguay to ensure 100% compliance with socio-environmental purchase criteria. This demonstrates the company's commitment to maintaining high standards of sustainability throughout its supply chain.

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#### Forest risk commodity

Timber products

#### Data type

Consumption data

#### Commodity production/ consumption volume

195230.1

#### Metric for commodity production/ consumption volume

Cubic meters

#### Data coverage

Full commodity production/consumption

#### Have any of your reported commodity volumes been verified as deforestation- and/or conversion-free?

Yes

#### % of reported volume verified as deforestation- and/or conversion-free

100

#### Please explain

Data reported refers to Minerva Foods Brazil.

Minerva Foods Brasil: In Brazil, Minerva Foods has strict requirements for its suppliers of native firewood. They must provide the Document of Forestry Origin (DOF), a mandatory license established by MMA Ordinance No. 253 on August 18, 2006. This license ensures the legal transportation and storage of forest products of native origin, including native charcoal. All wood extracted within the national territory must be certified and accompanied by the Document of Forest Origin (DOF), as mandated by Ordinance MMA No. 253. Suppliers of exotic species such as eucalyptus, rubber trees, or orange trees are also required to present a certificate of regularity issued by IBAMA, demonstrating compliance with regulations.

Minerva Foods Australia: Wood is not used as fuel in the boilers at the industrial units in Australia.

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#### Forest risk commodity

Timber products

#### Data type

Consumption data

#### Commodity production/ consumption volume

74439.17

#### Metric for commodity production/ consumption volume

Metric tons

#### Data coverage

Full commodity production/consumption

#### Have any of your reported commodity volumes been verified as deforestation- and/or conversion-free?

Yes

#### % of reported volume verified as deforestation- and/or conversion-free

100

#### Please explain

Data reported refers to Minerva Foods Latam.

Minerva Foods Latam: In operations across Latin America, specific authorization documents for cutting, sale, and transport are required for firewood. In Uruguay, the company adheres to the recommendations of the Lei de Desarrollo Forestal N° 15.939, which recommends that firewood sellers (particularly eucalyptus firewood) possess a "Sociedad" registration, similar to a CNPJ, to ensure the purchase does not occur in indigenous or preserved areas. In Paraguay, all firewood used is sourced from eucalyptus, and the legislation (Law 422/73) stipulates that providers must be registered with the Instituto Forestal Nacional. This registration ensures compliance with regulations and guarantees that the firewood is not sourced from preserved areas.

Minerva Foods Australia: Wood is not used as fuel in the boilers at the industrial units in Australia.

(F1.5b) Provide a breakdown of your DCF and non-DCF volumes relevant to your stage in the supply chain according to how verification is achieved and the highest level of traceability, respectively.

**Timber products – DCF**

**% of DCF production/consumption volume from areas with no or negligible risk of deforestation/conversion**

0

**% of DCF production/consumption volume verified through monitoring systems**

100

**% of DCF production/consumption volume physically certified**

0

**% of non-DCF production/consumption volume from unknown origin**

<Not Applicable>

**% of non-DCF production/consumption volume traceable only as far as country level**

<Not Applicable>

**% of non-DCF production/consumption volume traceable only as far as sub-national area**

<Not Applicable>

**% of non-DCF production/consumption volume traceable only as far as processing facility level**

<Not Applicable>

**% of non-DCF production/consumption volume traceable to production unit level**

<Not Applicable>

**Total percentage of production/consumption volume reported (DCF) [auto-calculated]**

**Total percentage of production/consumption volume reported (non-DCF) [(auto-calculated)]**

<Not Applicable>

**Timber products – Non DCF**

**% of DCF production/consumption volume from areas with no or negligible risk of deforestation/conversion**

<Not Applicable>

**% of DCF production/consumption volume verified through monitoring systems**

<Not Applicable>

**% of DCF production/consumption volume physically certified**

<Not Applicable>

**% of non-DCF production/consumption volume from unknown origin**

0

**% of non-DCF production/consumption volume traceable only as far as country level**

0

**% of non-DCF production/consumption volume traceable only as far as sub-national area**

0

**% of non-DCF production/consumption volume traceable only as far as processing facility level**

0

**% of non-DCF production/consumption volume traceable to production unit level**

0

**Total percentage of production/consumption volume reported (DCF) [auto-calculated]**

<Not Applicable>

**Total percentage of production/consumption volume reported (non-DCF) [(auto-calculated)]**



## Cattle – DCF

**% of DCF production/consumption volume from areas with no or negligible risk of deforestation/conversion**

0

**% of DCF production/consumption volume verified through monitoring systems**

100

**% of DCF production/consumption volume physically certified**

0

**% of non-DCF production/consumption volume from unknown origin**

<Not Applicable>

**% of non-DCF production/consumption volume traceable only as far as country level**

<Not Applicable>

**% of non-DCF production/consumption volume traceable only as far as sub-national area**

<Not Applicable>

**% of non-DCF production/consumption volume traceable only as far as processing facility level**

<Not Applicable>

**% of non-DCF production/consumption volume traceable to production unit level**

<Not Applicable>

**Total percentage of production/consumption volume reported (DCF) [auto-calculated]**

**Total percentage of production/consumption volume reported (non-DCF) [(auto-calculated)]**

<Not Applicable>

## Cattle – Non DCF

**% of DCF production/consumption volume from areas with no or negligible risk of deforestation/conversion**

<Not Applicable>

**% of DCF production/consumption volume verified through monitoring systems**

<Not Applicable>

**% of DCF production/consumption volume physically certified**

<Not Applicable>

**% of non-DCF production/consumption volume from unknown origin**

0

**% of non-DCF production/consumption volume traceable only as far as country level**

0

**% of non-DCF production/consumption volume traceable only as far as sub-national area**

0

**% of non-DCF production/consumption volume traceable only as far as processing facility level**

0

**% of non-DCF production/consumption volume traceable to production unit level**

0

**Total percentage of production/consumption volume reported (DCF) [auto-calculated]**

<Not Applicable>

**Total percentage of production/consumption volume reported (non-DCF) [(auto-calculated)]**

## F1.5c

**(F1.5c) For your disclosed commodity(ies), indicate the percentage of the production/consumption volume sourced by national and/or sub-national jurisdiction of origin.**

### Forest risk commodity

Cattle products

### Country/Area of origin

Brazil

### State or equivalent jurisdiction

Specify state/equivalent jurisdiction (São Paulo)

### % of total production/consumption volume

9.3

### Please explain

The calculation is derived from the total number of livestock slaughtered in São Paulo in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in São Paulo in relation to the company's total global slaughter operations.

### Forest risk commodity

Cattle products

### Country/Area of origin

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Goiás)

**% of total production/consumption volume**

12.3

**Please explain**

The calculation is derived from the total number of livestock slaughtered in Goiás in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in Goiás in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Tocantins)

**% of total production/consumption volume**

4.5

**Please explain**

The calculation is derived from the total number of livestock slaughtered in Tocantins in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in Tocantins in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Rondônia)

**% of total production/consumption volume**

8.1

**Please explain**

The calculation is derived from the total number of livestock slaughtered in Rondônia in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in Rondônia in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Mato Grosso )

**% of total production/consumption volume**

8.3

**Please explain**

The calculation is derived from the total number of heads slaughtered in Mato Grosso in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in Mato Grosso in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Minas Gerais)

**% of total production/consumption volume**

3.2

**Please explain**

The calculation is derived from the total number of livestock slaughtered in Minas Gerais in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in Minas Gerais in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Argentina

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Province of Santa Fé)

**% of total production/consumption volume**

12

**Please explain**

The calculation is derived from the total number of livestock slaughtered in the Province of Santa Fe in Argentina in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in the Province of Santa Fe in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Colombia

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Department of Córdoba)

**% of total production/consumption volume**

4

**Please explain**

The calculation is derived from the total number of livestock slaughtered in the Department of Córdoba in Colombia in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in the Department of Córdoba in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Colombia

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Department of Santander)

**% of total production/consumption volume**

3

**Please explain**

The calculation is derived from the total number of livestock slaughtered in the Department of Santander in Colombia in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in the Department of Santander in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Paraguay

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Assunción (Capital))

**% of total production/consumption volume**

7

**Please explain**

The calculation is derived from the total number of livestock slaughtered in Asunción Capital, Paraguay, in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in Asunción Capital, Paraguay, in relation to the company's total global slaughter operations.

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**Forest risk commodity**

Cattle products

**Country/Area of origin**

Paraguay

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (San Antonio - Central Department )

**% of total production/consumption volume**

4

**Please explain**

The calculation is derived from the total number of livestock slaughtered in San Antonio - Departamento Central, Paraguay, in 2022, divided by the total number of livestock slaughtered across all Minerva Foods' operations in various countries. The resulting quotient is then multiplied by 100 to obtain the percentage. This calculation provides insight into the proportion of livestock slaughtered in San Antonio - Departamento Central, Paraguay, in relation to the company's total global slaughter operations.

---

**Forest risk commodity**

Cattle products

**Country/Area of origin**

Paraguay

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Belén - Department of Concepción)

---

**% of total production/consumption volume**

11

**Please explain**

The calculation is derived from the aggregate number of livestock slaughtered in the Belén - Departamento de Concepción region in Paraguay during the year 2022. This figure is then divided by the total livestock slaughtered across all countries within our organization. Finally, the result is multiplied by 100 to obtain the percentage.

---

**Forest risk commodity**

Cattle products

**Country/Area of origin**

Any other countries/areas

**State or equivalent jurisdiction**

&lt;Not Applicable&gt;

**% of total production/consumption volume**

4

**Please explain**

Uruguay - Department of Cerro Largo

The calculation is derived from the total number of livestock slaughtered in the Cerro Largo Department, Uruguay, during the year 2022. This figure is then divided by the total number of livestock slaughtered across all countries within our organization. Finally, the result is multiplied by 100 to express the data in percentage form.

---

**Forest risk commodity**

Cattle products

**Country/Area of origin**

Any other countries/areas

**State or equivalent jurisdiction**

&lt;Not Applicable&gt;

**% of total production/consumption volume**

8

**Please explain**

Uruguay - Department of Canelones

The calculation is based on the total number of livestock slaughtered in the Departamento de Canelones, Uruguay, during the year 2022. This figure is then divided by the total number of livestock slaughtered across all countries within our organization. Finally, the result is multiplied by 100 to express the data in percentage form.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Tocantins)

**% of total production/consumption volume**

10

**Please explain**

The calculation involves dividing the wood consumption at the Araguaína plant by the total wood consumption of the company. The result is then multiplied by 100 to express the data as a percentage.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Rondônia)

**% of total production/consumption volume**

8

**Please explain**

The calculation is based on dividing the wood consumption at the Rolim de Moura plant by the total wood consumption of the company. The result is then multiplied by 100 to express the data as a percentage.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (São Paulo)

**% of total production/consumption volume**

18

**Please explain**

The calculation involves adding the wood consumption at the Barretos and José Bonifácio plants and then dividing the total by the quantity of wood consumed by the company. The result is then multiplied by 100 to express the data as a percentage.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Minas Gerais )

**% of total production/consumption volume**

6

**Please explain**

The calculation is based on dividing the wood consumption at the Janaúba plant by the total quantity of wood consumed by the company. The result is then multiplied by 100 to express the data as a percentage

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Mato Grosso )

**% of total production/consumption volume**

10

**Please explain**

The calculation involves adding the wood consumption at the Mirassol D'Oeste and Paranatinga plants and then dividing the total by the quantity of wood consumed by the company. The result is then multiplied by 100 to express the data as a percentage.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Brazil

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Goiás)

**% of total production/consumption volume**

23

**Please explain**

The calculation is based on dividing the wood consumption at the Palmeiras de Goiás plant by the total amount of wood consumed by the company. The result is then multiplied by 100 to express the data as a percentage.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Paraguay

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Assunción - Capital)

**% of total production/consumption volume**

12

**Please explain**

The calculation involves adding the wood consumption of the plants located in Asunción, Paraguay (Plant 2, Plant 8, and Plant 13) and then dividing the total by the amount of wood consumed by the company. The result is then multiplied by 100 to express the data as a percentage.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Paraguay

**State or equivalent jurisdiction**

Specify state/equivalent jurisdiction (Department of Concepción)

**% of total production/consumption volume**

6.9

**Please explain**

The calculation involves adding the wood consumption at Plant 23 in the city of Belén, Paraguay, and then dividing the total by the quantity of wood consumed by the company. The result is then multiplied by 100 to express the data as a percentage.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Any other countries/areas

**State or equivalent jurisdiction**

<Not Applicable>

**% of total production/consumption volume**

0.1

**Please explain**

Uruguay - Department of Canelones

The calculation involves adding the wood consumption at the Carrasco and Canelones plants in the Department of Canelones, Uruguay, and then dividing the total by the quantity of wood consumed in the country. The result is then multiplied by 100 to express the data as a percentage.

---

**Forest risk commodity**

Timber products

**Country/Area of origin**

Any other countries/areas

**State or equivalent jurisdiction**

<Not Applicable>

**% of total production/consumption volume**

0.02

**Please explain**

Uruguay - Department of Cerro Largo

The calculation involves adding the wood consumption at the Carrasco and Canelones plants in the Department of Canelones, Uruguay, and then dividing the total by the quantity of wood consumed in the country. The result is then multiplied by 100 to express the data as a percentage.

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**F1.6**

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**(F1.6) Has your organization experienced any detrimental forests-related impacts?**

No

**F1.7**

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**(F1.7) Indicate whether you have assessed the deforestation or conversion footprint for your disclosed commodities over the past 5 years, or since a specified cutoff date, and provide details.**

**Forest risk commodity**

Timber products

**Have you monitored or estimated your deforestation/conversion footprint?**

Yes, we monitor deforestation/conversion footprint in our supply chain

**Coverage**

Full consumption volume

**Reporting deforestation/conversion since a specified cutoff date or during the last five years?**

During the last 5 years

**Known or estimated deforestation/ conversion footprint (hectares)**

0

**Describe methods and data sources used to monitor or estimate deforestation/ conversion footprint**

Minerva Foods Brasil: The Company enforces a requirement for all suppliers of native firewood in its Brazilian operations to present the Document of Forestry Origin (DOF), established by Ordinance MMA No. 253, of August 18, 2006. This document serves as a mandatory license for transporting and storing forest products of native origin, including native charcoal. All wood extracted within the national territory must be certified and accompanied by the Document of Forest Origin (DOF) as per the regulations outlined in Ordinance MMA n°. 253, of August 18, 2006. For suppliers dealing with exotic species such as eucalyptus, rubber trees, or orange trees, a certificate of regularity from IBAMA is required.

Minerva Foods Latam: In Latam operations, a specific document authorizing cutting, sale, and transport is necessary. For operational units in Uruguay, compliance with the legislation (Lei de Desarrollo Forestal N° 15.939) recommends that companies selling firewood (eucalyptus) possess a "Sociedad" (similar to a CNPJ), which ensures that the purchase is not sourced from indigenous or preserved areas. In the case of plants in Paraguay, all firewood used is eucalyptus, and the legislation (Law 422/73) mandates that the provider must be registered with the Instituto Forestal Nacional, guaranteeing that the firewood is not sourced from preserved areas.

Minerva Foods Australia: Wood is not utilized as fuel in the boilers at the industrial units.

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**Forest risk commodity**

Cattle products

**Have you monitored or estimated your deforestation/conversion footprint?**

No, but we plan to monitor or estimate our deforestation/conversion footprint in the next two years

**Coverage**

<Not Applicable>

**Reporting deforestation/conversion since a specified cutoff date or during the last five years?**

<Not Applicable>

**Known or estimated deforestation/ conversion footprint (hectares)**

<Not Applicable>

**Describe methods and data sources used to monitor or estimate deforestation/ conversion footprint**

<Not Applicable>

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## F2. Procedures

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### F2.1

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

Yes, forests-related risks are assessed

### F2.1a

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

## Timber products

### Value chain stage

Direct operations  
Supply chain  
Other parts of the value chain

### Coverage

Full

### Risk assessment procedure

Assessed as part of an established enterprise risk management framework

### Frequency of assessment

More than once a year

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

> 6 years

### Tools and methods used

Internal company methods  
National specific tools and databases

### Issues considered

Availability of forest risk commodities  
Quality of forests risk commodities  
Impact of activity on the status of ecosystems and habitats  
Regulation  
Climate change  
Tariffs or price increases  
Loss of markets  
Brand damage related to forests risk commodities

### Stakeholders considered

Customers  
Employees  
Investors  
Local communities  
NGOs  
Other forest risk commodity users/producers at a local level  
Regulators  
Suppliers

### Please explain

In Minerva Foods, the management of direct risks is overseen by the Purchasing Management team, which reports to the Chief Operating Officer (COO) and operates in alignment with the company's strategy and socio-environmental criteria for input procurement. The Audit, Risks, and Compliance department provide support for this process.

Minerva Foods Brasil: The company has a stringent requirement for all suppliers of native firewood in its Brazilian operations. These suppliers must present the Document of Forestry Origin (DOF), established by Ordinance MMA No. 253, of August 18, 2006. This document serves as a mandatory license for transporting and storing forest products of native origin, including native charcoal. Compliance with these regulations is essential, and all wood sourced from the national territory must be certified and accompanied by the Document of Forest Origin (DOF) as per the provisions in Ordinance MMA n°. 253, of August 18, 2006. Furthermore, suppliers dealing with exotic species, such as eucalyptus, rubber trees, or orange trees, are required to present a certificate of regularity from IBAMA.

Minerva Foods Latam: In operations across the Latam region, a specific authorization document for cutting, sale, and transport of wood is necessary. For operational units in Uruguay, the legislation (Lei de Desarrollo Forestal N° 15.939) recommends that companies selling firewood (eucalyptus) possess a "Sociedad" (similar to a CNPJ), which eliminates the risk of purchasing from indigenous or preserved areas. In the case of plants in Paraguay, the company exclusively uses eucalyptus for its firewood needs, and the legislation (Law 422/73) mandates that the providers be registered with the Instituto Forestal Nacional, ensuring that the firewood is not sourced from preserved areas.

Minerva Foods Australia: At the industrial units in Australia, wood is not utilized as fuel for the boilers.



## Cattle products

### Value chain stage

- Direct operations
- Supply chain
- Other parts of the value chain

### Coverage

Full

### Risk assessment procedure

Assessed as part of an established enterprise risk management framework

### Frequency of assessment

More than once a year

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

> 6 years

### Tools and methods used

- Internal company methods
- External consultants
- Beef on Track
- National specific tools and databases
- Jurisdictional/landscape assessment
- Other, please specify (MapBiomass, GFW, Guyra)

### Issues considered

- Impact of activity on the status of ecosystems and habitats
- Regulation
- Climate change
- Loss of markets
- Leakage markets
- Brand damage related to forests risk commodities
- Corruption
- Social impacts

### Stakeholders considered

- Customers
- Employees
- Investors
- Local communities
- NGOs
- Regulators
- Suppliers

### Please explain

One of the significant risks faced in the livestock value chain in South America is illegal deforestation, which may be associated with the invasion of indigenous lands, traditional communities, or environmental protection areas, as well as instances of forced labor. To proactively address these socio-environmental risks across all its commercial relationships, the Company implements an internal methodology that involves the evaluation of land ownership documents, collaboration with external consultants, and the use of technological tools such as geomonitoring and applications. The company was the first in the country to monitor 100% of its direct suppliers in all biomes in Brazil and Paraguay.

Minerva Foods Brasil: To ensure compliance and ethical practices, the Company requires proof of land ownership during registration and for each negotiation with potential suppliers. Moreover, it diligently cross-references with the list of areas embargoed by the Federal Environmental Agency (IBAMA) and the Register of Employers who have subjected workers to conditions analogous to slavery. By employing a geomonitoring tool, Minerva Foods verifies occurrences of illegal deforestation using PRODES as a reference, and checks for overlaps with Conservation Units, Indigenous Lands, and quilombola communities. An annual audit of the monitoring system is carried out, with particular emphasis on Minerva Foods' performance. The Company maintains the best performance among major market players for the third consecutive year in the third-party audit conducted by the Federal Public Ministry in Pará (TAC), achieving 100% compliance. Additionally, since 2013, Minerva Foods has consistently attained 100% compliance with the audits of the Public Commitment to Livestock (CPP), which was assumed in 2009, in partnership with Greenpeace.

Minerva Foods Latam: The Company diligently performs geographic monitoring of its direct suppliers in accordance with local legislation to address concerns related to illegal deforestation and potential overlaps with protected areas and indigenous and/or traditional lands. Monitoring for instances of slave labor is also a priority. Notably, the audit of the monitoring system in Paraguay resulted in the Company achieving 100% compliance for the third time, demonstrating its commitment to responsible practices.

## F2.2

### (F2.2) For each of your disclosed commodity(ies), has your organization mapped its value chains?

	Value chain mapping	Primary reason for not mapping your value chain	Explain why your organization does not map its value chain and outline any plans to introduce it
Timber products	Yes, we have mapped the entire value chain	<Not Applicable>	<Not Applicable>
Palm oil	<Not Applicable>	<Not Applicable>	<Not Applicable>
Cattle products	Yes, we have partially mapped the value chain	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Cocoa	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Coffee	<Not Applicable>	<Not Applicable>	<Not Applicable>

F2.2a

(F2.2a) Provide details of your organization's value chain mapping for its disclosed commodity(ies).

**Forest risk commodity**

Timber products

**Scope of value chain mapping**

Tier 1 suppliers  
Smallholders

**% of total suppliers covered within selected tier(s)**

100

**Description of mapping process and coverage**

Minerva Foods prioritizes the approval of suppliers based on their environmental documentation, ensuring it aligns with sustainable practices and is compatible with their specific activities. This approval process extends to both tier 1 suppliers and small producers in the supply chain. By thoroughly evaluating and verifying the environmental documentation of these suppliers, the company aims to ensure that they adhere to the required socio-environmental criteria.

**Your own production and primary processing sites: attach a list of facility names and locations (optional)**

**Your suppliers' production and primary processing sites: attach a list of names and locations (optional)**

F2.3

(F2.3) Do you use a classification system to determine risk of deforestation and/or conversion of other ecosystems for your sourcing areas, and if yes, what methodology is used, and what is the classification used for?

	Use of a classification system to determine deforestation and/or conversion risk of sourcing areas	Methodology used for classifying levels of risk	Use of risk classification	Attachment indicating risk classification for each sourcing area (optional)
1	No, but we plan to in the next two years	<Not Applicable>	<Not Applicable>	<Not Applicable>

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 products	Yes
Palm oil	<Not Applicable>
Cattle products	Yes
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other - Cocoa	<Not Applicable>
Other - Coffee	<Not Applicable>

F3.1a

### (F3.1a) How does your organization define substantive financial or strategic impact on your business?

Minerva Foods demonstrates a proactive approach to risk management and recognizes the potential impact of its dependence on forest commodities in its direct operations and value chain. To address and manage these risks effectively, the company has implemented a comprehensive Risk Management Policy since 2019, publicly available on its website. This policy ensures that risks are periodically identified, documented, and structured to be known and addressed in a systematic manner.

The identified risks are categorized according to their nature and origin:

**Strategic Risks:** These risks are associated with management's strategic decisions in pursuit of the company's business objectives.

**Financial Risks:** This category is further divided into three segments:

**Market Risks:** Arise from possible losses caused by fluctuations in interest rates, exchange rates, share prices, and commodity prices.

**Credit Risks:** Relate to potential losses due to uncertainty in receiving amounts agreed upon with third parties.

**Liquidity Risks:** Involve the possibility of the company being unable to meet its obligations effectively, potentially leading to significant losses.

**Compliance Risks:** These risks involve potential sanctions due to non-compliance with applicable legislation, agreements, regulations, codes of conduct, and policies.

**Operational Risks:** Arise from issues within the company's infrastructure that may impact operational efficiency and resource utilization.

Among the significant financial and strategic impacts that can affect Minerva Foods' business are fluctuations in raw material costs (mainly cattle purchases) and selling prices of its products. These prices can be influenced by various factors, including supply and demand dynamics, climate change-related events affecting cattle supply, disease outbreaks, economic conditions, and more. To address the financial impact of such risks, Minerva Foods diversifies its cattle purchases across various locations, leveraging the geographical diversity of its operations.

Additionally, in response to growing climate risks, the company initiated a project in 2022 to integrate climate risks (physical and transitional) into its risk management. This involves considering climate change scenarios aligned with its strategic vision in the medium and long term (2030 and 2050), as recommended by the Task Force on Climate-related Financial Disclosures (TCFD). The project aims to prioritize initiatives that mitigate climate risks, and the preliminary results have been included in the 2022 Sustainability Report. The project is expected to be completed in 2023.

Within this project, Minerva Foods is analyzing potential impacts of physical risks, such as cold and heat waves, meteorological droughts, floods, and fires, on its forestry operations. Additionally, they are mapping and analyzing transition risks related to regulation, reputation, market, and technology. For assets with higher risk, the company will define mitigation plans to address these challenges effectively. To prioritize the initiatives that mitigate these risks, the Company considers that a significant financial risk is one that, if materialized, fears the potential to cause a financial impact from 10% of EBITDA, or that represents a value of about R\$ 280 million (considering that the EBITDA of the Company in 2022 was R\$ 2.8 billion).

As the leading exporter in South America with approximately 70% of its revenue coming from international markets, Minerva Foods is exposed to trade barriers and regulatory changes in various importing countries. For example, there is the case of the European Union imposition of stringent sustainability requirements, and any loss of sales in this market would result in an estimated 8% reduction in the company's revenue, equivalent to approximately 1.8 billion reais.

### F3.1b

#### (F3.1b) For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

##### Forest risk commodity

Cattle products

##### Type of risk

Acute physical

##### Geographical scale

Municipality or equivalent

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

Direct operation

##### Primary risk driver

Heavy precipitation (rain, hail, snow/ice)

##### Primary potential impact

Increased operating costs

##### Company-specific description

The impacts of climate change, exacerbated by deforestation of native vegetation, pose significant challenges for Minerva Foods' beef production units in South America. Alterations in the rainfall regime can lead to extreme hydrological events, including floods and prolonged droughts, which directly affect water availability. These changes threaten the supply of cattle to all of Minerva Foods' operational units in Brazil, Argentina, Colombia, Uruguay, and Paraguay.

Specifically, in the north of Brazil, where herd supplementation is less common compared to the center-south, long periods of drought can have a more significant impact on the price of cattle. This can result in higher price fluctuations compared to regions like the center-west or southeast of the country. Operational units in Araguaína and Rolim de Moura may be particularly affected by these climate-driven challenges, as they represent approximately 12% of the company's overall slaughter capacity.

To ensure continued production and minimize the impact of water availability challenges in specific regions, Minerva Foods may need to consider implementing adaptive measures. One approach could be to increase slaughter capacity in other operational units that are less affected by water scarcity or drought. By strategically redirecting cattle to more favorable locations, the company can maintain its production levels and mitigate the effects of climate-related disruptions.

##### Timeframe

>6 years

##### Magnitude of potential impact

Medium-low

#### Likelihood

Likely

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

No, we do not have this figure

#### Potential financial impact (currency)

<Not Applicable>

#### Potential financial impact figure - minimum (currency)

<Not Applicable>

#### Potential financial impact figure - maximum (currency)

<Not Applicable>

#### Explanation of financial impact

There is no calculated value of the financial impact, considering that it will depend on several variables such as the availability of animals, market conditions (supply and demand) depending on the country and region, in addition to the production cycle of the livestock chain.

#### Primary response to risk

Supplier diversification

#### Description of response

The scarcity of water resources due to climate changes and prolonged droughts has compelled Minerva Foods to make strategic changes to ensure a steady supply of raw materials for its industries. One of the measures taken by the company is to add other suppliers located in regions with greater water availability. This helps ensure a consistent supply of live cattle and avoid any disruption in slaughter and production that could result in a significant financial impact on the company's operations.

The China is the largest buyer of Brazilian beef. The Chinese market offers high profitability for slaughterhouses, but it requires specific conditions, such as young animals (up to 30 months old). Prolonged droughts affect the quality of pastures, decrease productivity, and increase the fattening time and age of the animals, directly impacting the supply of suitable cattle for this market.

To address these challenges and reduce risks associated with local supply shortages and resource consumption, Minerva Foods made an important decision in 2021 to increase geographic diversification. This decision involved a structured joint venture with Salic to acquire two specialized sheep slaughterhouses in Australia. This move not only mitigates risks and uncertainties prevalent in the segment but also allows the company to plan and build a more resilient and future-oriented Minerva Foods.

#### Cost of response

169000000000

#### Explanation of cost of response

Amount invested in the acquisition of the four units in Australia, in 2021 and 2022.

---

#### Forest risk commodity

Cattle products

#### Type of risk

Regulatory

#### Geographical scale

Country

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

Direct operation

Supply chain

#### Primary risk driver

Non-compliance with national legislation

#### Primary potential impact

Reduction or disruption in production capacity

#### Company-specific description

Minerva Foods demonstrates a strong commitment to ensuring that its cattle suppliers comply with labor and environmental regulations and adhere to the company's policies and procedures. The company's approach to monitoring suppliers' properties using geospatial technology allows them to verify deforestation, overlaps with indigenous lands, and conservation units. If suppliers are found to be in violation of these criteria, they are unable to negotiate with Minerva Foods.

This proactive stance on supplier compliance is crucial for maintaining a sustainable and responsible beef supply chain. In 2022, in Brazil alone, Minerva Foods blocked 414 suppliers, representing 4% of the supplier base, due to various violations, including illegal deforestation and embargoes by IBAMA.

Similarly, in Paraguay, the company detected irregularities in 243 suppliers (9.9%) who did not meet the socio-environmental criteria set by Minerva Foods. The main reasons for blocking these suppliers included illegal deforestation and overlapping of indigenous lands, underscoring the company's commitment to upholding environmental and social standards.

Moreover, Minerva Foods is actively implementing monitoring systems in other countries in South America. These initiatives aim to ensure that all suppliers across the region adhere to the company's socio-environmental criteria, promoting responsible sourcing practices and mitigating the risk of disruptions in the beef supply chain.

#### Timeframe

>6 years

#### Magnitude of potential impact

Medium

#### Likelihood

Likely

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

Yes, a single figure estimate

**Potential financial impact (currency)**

13728500

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

&lt;Not Applicable&gt;

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

&lt;Not Applicable&gt;

**Explanation of financial impact**

The value of the fine (BRL 500.00) per head of cattle acquired in 2022 in Pará was considered for the impact calculation.

**Primary response to risk**

Greater traceability of forest-risk commodities

**Description of response**

Minerva Foods places significant emphasis on traceability and ensuring compliance with environmental and labor regulations within its livestock supply chain. The company employs cutting-edge technology, such as the SMGeo Direto geospatial monitoring platform developed by Niceplanet Geotecnologia, to assess direct supplier farms for potential responsibilities or irregularities.

In Brazil, Minerva Foods ensures 100% traceability of direct supplies across all regions and biomes. This meticulous process involves verifying property details, presenting the Rural Environmental Registry (CAR), and cross-referencing it with publicly available information to identify instances of illegal deforestation, encroachments on indigenous or quilombola lands, conservation units, and working conditions.

Minerva Foods was a pioneer in geospatial monitoring in Paraguay, where 100% of the supplying farms are monitored based on established socio-environmental criteria. Additionally, the company has started to expand monitoring efforts to Colombia and Argentina, with over 80% and approximately 90% of direct suppliers already under monitoring in these countries, respectively. In Uruguay, the implementation of monitoring is currently in the study phase.

The company is committed to achieving 100% geographic monitoring of direct supplier farms in Colombia by 2023, Uruguay by 2025, and other South American countries by 2030.

**Cost of response**

2000000000

**Explanation of cost of response**

The calculation considers the annual amount spent with the geospatial monitoring system.

**Forest risk commodity**

Timber products

**Type of risk**

Acute physical

**Geographical scale**

Municipality or equivalent

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

Direct operation

Supply chain

**Primary risk driver**

Heavy precipitation (rain, hail, snow/ice)

**Primary potential impact**

Increased capital costs

**Company-specific description**

Climate change and deforestation of native vegetation can indeed have significant impacts on the availability and quality of biomass, such as firewood, used in the operational units of Araguaína and Rolim de Moura. Alterations in the rainfall regime, characterized by an increase in extreme hydrological events like floods and prolonged droughts, can directly affect the cultivation and quality of biomass, impacting its heating power and cost.

Excessive rainfall can lead to increased moisture content in the firewood, reducing its calorific value and heating efficiency. As a result, more firewood would be needed to generate the same amount of heat, leading to higher consumption and increased costs for the operational units that heavily rely on this biomass as a fuel source.

Considering that Araguaína and Rolim de Moura have a high rainfall regime and the possibility of an increase in extreme weather events due to climate change, the risk of facing challenges in the availability and quality of biomass becomes more significant. This risk could result in higher operational costs and potential disruptions in the supply of firewood.

To mitigate these risks, Minerva Foods consider adopting alternative fuel sources or optimizing its firewood usage practices. It is crucial for the company to continue its efforts in monitoring and managing climate-related risks across its operations, as well as exploring sustainable practices that reduce its overall environmental impact.

**Timeframe**

&gt;6 years

**Magnitude of potential impact**

Medium-high

**Likelihood**

Likely

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

Yes, a single figure estimate

**Potential financial impact (currency)**

2000000

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

&lt;Not Applicable&gt;

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

<Not Applicable>

**Explanation of financial impact**

Estimated value of fixed costs per day of stoppage of the two operating units in the North region (Araguaína and Rolim de Moura). The value of BRL 1 million per day per unit was considered, so if there was a stoppage, it would have an impact of BRL 2,000,000.00 per day of stopped operation.

**Primary response to risk**

Supplier diversification

**Description of response**

The Business Intelligence department at Minerva Foods plays a crucial role in assessing the potential impacts of weather events on raw material prices and operating costs. The department utilizes various tools and methodologies to conduct climate assessments and identify significant weather-related risks that may affect the company's operations.

One of the key tools used is market analysis, often in collaboration with consultancies specializing in climate analysis. This analysis not only focuses on financial considerations but also examines rainfall indicators, such as the patterns associated with La Niña and El Niño effects, in the regions where Minerva Foods operates its units and value chain. Understanding the potential effects of these weather patterns helps the company anticipate and prepare for any disruptions that may occur due to changes in weather conditions.

To mitigate the impact of weather-related risks, Minerva Foods has contingency measures in place. One such action involves approving suppliers that are located farther from the operational units. By diversifying the supplier base, the company aims to reduce its reliance on specific regions that might be more vulnerable to weather-related events. This approach helps ensure a more stable and resilient supply of raw materials.

**Cost of response**

0

**Explanation of cost of response**

There are no costs because it is an internal planning of the company.

---

**Forest risk commodity**

Timber products

**Type of risk**

Regulatory

**Geographical scale**

Forest management unit

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

Direct operation

**Primary risk driver**

Increased difficulty in obtaining operations permits

**Primary potential impact**

Reduction or disruption in production capacity

**Company-specific description**

The lack of firewood, which serves as a fuel source for the boiler to produce steam, presents a significant challenge for Minerva Foods' operations. Without a steady supply of steam, the company cannot carry out essential activities in the plants that rely on this fuel, affecting all units in Brazil, Paraguay, and Uruguay. Compliance with current legislation requires the use of hot water for sterilizing equipment, and the absence of steam hinders this process.

If the temperature standards mandated by the inspection body are not met, production must be immediately suspended until the ideal temperature is achieved. Injecting steam into the line is the necessary solution to achieve the required temperature levels. However, with the current limitations on firewood availability, this poses difficulties and delays in restoring production to the required standard. Such interruptions can lead to sanctions by regulatory bodies if standards are not met promptly.

**Timeframe**

>6 years

**Magnitude of potential impact**

High

**Likelihood**

Likely

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

Yes, a single figure estimate

**Potential financial impact (currency)**

2000000

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

<Not Applicable>

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

<Not Applicable>

**Explanation of financial impact**

Based on the provided information, the estimated value of fixed costs per day of stoppage for the two operating units in the North region (Araguaína and Rolim de Moura) is BRL 2,000,000.00 per day. This value represents the total fixed costs for both units combined, with each unit contributing BRL 1 million per day.

**Primary response to risk**

Market expansion

**Description of response**

Through the approval of more suppliers, the Company is able to diversify its purchases and reduce the risk of firewood shortages.

**Cost of response**

**Explanation of cost of response**

There are no costs because it is an internal planning of the company.

**Forest risk commodity**

Cattle products

**Type of risk**

Regulatory

**Geographical scale**

Country

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

Direct operation

Supply chain

**Primary risk driver**

Changes to international law and bilateral agreements

**Primary potential impact**

Disruption to sales

**Company-specific description**

The implementation of the EU Deforestation-free Regulation (EUDR) poses significant challenges for the export of agricultural products from Brazil and South America to the European market. The regulation prohibits the export of certain commodities, including cocoa, coffee, soy, palm oil, wood, beef, and rubber, along with their derivative products, if they are grown in deforested forest areas after December 2020.

Notably, the EUDR goes beyond national regulations and prohibits all types of deforestation, even those considered legal in the countries of origin. This stringent approach is likely to impact the export of agricultural products from Brazil and other South American countries to the European Union, as compliance with the regulation's requirements can be complex.

One of the significant challenges lies in ensuring complete traceability of animals and compliance with socio-environmental requirements for marketing. Traceability of the entire supply chain is crucial to demonstrate that the products meet the sustainability and environmental criteria set by the EUDR. However, the availability of public data, especially in Brazil, can be limited, making it difficult to provide full traceability and comply with the regulation's requirements.

**Timeframe**

1-3 years

**Magnitude of potential impact**

Medium-low

**Likelihood**

Likely

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

Yes, a single figure estimate

**Potential financial impact (currency)**

2632000000

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

<Not Applicable>

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

<Not Applicable>

**Explanation of financial impact**

The potential loss of sales in the European Union due to the implementation of the EU Deforestation-free Regulation (EUDR) poses a significant financial impact for Minerva Foods, as the export leader in South America. The European Union is known for its stringent sustainability requirements, and failure to comply with the EUDR could lead to a substantial reduction in the Company's export revenues.

Based on the given information, if Minerva Foods were to lose its sales in the European Union completely, it would result in a reduction of approximately 8% in the company's exportation revenue. Given that exports represent around 69% of the company's total revenue, this translates to an estimated loss of approximately BRL 1.8 billion in revenue.

Furthermore, in the worst-case scenario, if exports to the European Union were to drop to zero, the financial impact would be even more severe. The loss of revenue would be approximately BRL 2.632 billion, which could significantly affect Minerva Foods' overall financial performance and profitability.

**Primary response to risk**

Monitor and stay ahead of regulation

**Description of response**

Minerva Foods has been adopting a proactive approach to meet new market requirements, such as the European Union's Deforestation-free Regulation (EUDR), demonstrating the company's commitment to sustainability and responsible sourcing.

The company invests in supplier monitoring tools is a crucial step to ensure traceability and compliance with sustainability standards throughout the supply chain. By effectively monitoring suppliers, Minerva Foods can demonstrate that its products are not linked to deforestation, meeting the criteria set by the EUDR and other market regulations.

By integrating sustainability into its business strategy and actively participating in multi-stakeholder initiatives, Minerva Foods positions itself as a leader in responsible business practices in the South American export market. Such initiatives not only help mitigate financial risks related to market access but also highlight the company's commitment to environmental protection and social responsibility, factors increasingly important to consumers and investors. Participation in organizations such as the Brazilian Association of Meat Exporting Industries (ABIEC), the Indirect Suppliers Working Group (GTFI), the Global Roundtable for Sustainable Beef (GRSB), the Paraguayan Sustainable Meat Roundtable (MPCS), and the Colombian Sustainable Livestock Roundtable reflects the company's dedication to being a positive agent of change in the industry and the communities it operates in.

**Cost of response**

200000000

**Explanation of cost of response**

Amount invested annually in the supplier monitoring tool.

## 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 products	Yes
Palm oil	<Not Applicable>
Cattle products	Yes
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other - Cocoa	<Not Applicable>
Other - Coffee	<Not Applicable>

## F3.2a

**(F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.****Forest risk commodity**

Cattle products

**Type of opportunity**

Markets

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

Supply chain

**Primary forests-related opportunity**

Increased growth in the alternative protein market

**Company-specific description**

In 2020, Minerva Foods established its innovation department, comprising four key pillars: i. Advanced Data Analysis or "Business Analytics," ii. Corporate Venture Capital, iii. E-commerce and Marketplace, and iv. Decarbonization. Each pillar aims to address specific challenges and seize opportunities within the food industry value chain, ultimately enhancing the company's overall performance and sustainability.

The Corporate Venture Capital pillar focuses on strategic investments in startups and technology companies that align with Minerva Foods' value chain, encompassing areas such as alternative proteins, logistics, livestock, agtech, and retail. By strategically investing in these companies, Minerva Foods aims to unlock unique opportunities and create synergies that can contribute to long-term growth and success.

One notable investment in the Corporate Venture Capital initiative is The Every company, a company directly linked to the advancement of alternative proteins. This investment underscores Minerva Foods' commitment to exploring and supporting innovative solutions that have the potential to shape the future of food production and consumption.

**Estimated timeframe for realization**

&gt;6 years

**Magnitude of potential impact**

Medium

**Likelihood**

Virtually certain

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

No, we do not have this figure

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

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

&lt;Not Applicable&gt;

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

&lt;Not Applicable&gt;

**Explanation of financial impact figure**

The potential financial impact has not been calculated.

**Cost to realize opportunity**

4000000

**Strategy to realize opportunity**

Minerva Foods' strategic approach to capitalize on the growing opportunity in alternative proteins involves investing in businesses that align with this emerging trend. One such investment is The EVERY Company, formerly known as Clara Foods, a pioneering startup headquartered in San Francisco, United States, specializing in fermentation-based protein products that are entirely free of animal protein. This innovative partnership allows Minerva Foods to tap into the expanding market of



environmentally conscious consumers while also addressing a key challenge in the food industry - the development of sustainable and eco-friendly protein sources.

The every Company's production process stands out for its commitment to sustainability. It utilizes ingredients that are free of pesticides, antibiotics, and preservatives, contributing to healthier and more environmentally-friendly protein products. Moreover, the production process is designed to consume significantly less water and energy compared to conventional protein sources, aligning perfectly with Minerva Foods' overarching sustainability strategy.

Recognizing the potential of The EVERY Company and the opportunity it presents in the alternative protein market, Minerva Foods made a significant investment of US\$ 4 million in the startup in 2022. This substantial investment underscores Minerva Foods' dedication to research and development in the alternative protein space, as well as its commitment to mitigating climate risks and advancing sustainable practices

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### Forest risk commodity

Cattle products

### Type of opportunity

Efficiency

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

Supply chain

Other parts of the value chain

### Primary forests-related opportunity

Nature-Based Solutions

### Company-specific description

Minerva Foods recognizes the significance of investing in nature-based solutions as a vital and sustainable approach to address environmental, climate, and social challenges. Embracing these solutions provides a practical means of striking a balance between economic development and nature conservation, while fostering community resilience and well-being.

To underscore its commitment to sustainable practices and to achieve a net-zero carbon footprint by 2035, Minerva Foods launched the Renove Program in 2021. The program is designed to fortify and implement sustainable, profitable, and low-carbon livestock farming initiatives. Through ongoing projects under the Renove Program, the company employs nature-based solutions to address various environmental concerns.

One prominent aspect of the Renove Program is the restoration of ecosystems, which involves efforts to rehabilitate and protect critical habitats. Additionally, the program promotes regenerative agriculture, a practice that seeks to enhance soil health, increase biodiversity, and improve carbon sequestration. By integrating these nature-based solutions, Minerva Foods is actively contributing to the protection of biodiversity, a vital component of a healthy and sustainable ecosystem.

### Estimated timeframe for realization

>6 years

### Magnitude of potential impact

Medium-high

### Likelihood

More likely than not

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

No, we do not have this figure

### Potential financial impact figure (currency)

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

### Explanation of financial impact figure

Potential financial impact has not been calculated.

### Cost to realize opportunity

4010763

### Strategy to realize opportunity

Minerva Foods is firmly committed to achieving carbon neutrality by the year 2035. To achieve this ambitious goal, the company launched the Renove program in 2021, with a primary focus on strengthening and implementing sustainable livestock farming practices that promote low-carbon production.

The Renove program encompasses two ongoing projects:

**LATAM Certification Project:** Through the Renove Program, Minerva Foods has successfully exported carbon-neutral beef to various international markets, including the United States, Spain, Italy, and Chile, originating from its industrial operations in Brazil and Uruguay. To attain this, the program ensured that partner farms, the company's industrial units, and logistics operations underwent thorough carbon footprint audits and obtained third-party certification with the 'CO<sub>2</sub> neutral' seal. MyCarbon, a subsidiary of Minerva Foods, facilitated the offsetting of emissions by utilizing carbon credits from tree planting and forest preservation initiatives.

**Carbon Project:** In a pioneering approach towards generating carbon credits from agriculture in Brazil, the Renove program is forging ahead with technical cooperation agreements with livestock farmers who supply Minerva Foods. The parties involved are expressing their commitment to transitioning from conventional livestock management practices to regenerative practices that not only increase productivity but also mitigate or reduce greenhouse gas emissions. Technical teams from the program are conducting on-site evaluations of farms located in six Brazilian states to assess the potential for rehabilitating degraded pastures, implementing integrated systems, and introducing food additives in animal feed to minimize enteric methane emissions. To make the implementation of these practices feasible, strategic partnerships have been established with major input, financing, and technological innovation companies that share the common goal of fostering a highly productive agricultural sector with minimal carbon emissions.

Minerva Foods has invested a total of BRL 4,010,763.00 in the Renove program since its inception in 2021. Budget allocations for the program's future years are made annually.

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### Forest risk commodity

Timber products

**Type of opportunity**

Efficiency

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

- Direct operation
- Supply chain
- Other parts of the value chain

**Primary forests-related opportunity**

Cost savings

**Company-specific description**

Minerva Foods is actively exploring the feasibility of utilizing alternative fuel sources to reduce the reliance on firewood, both native and exotic. The company recognizes the importance of diversifying its energy sources to achieve cost savings and mitigate the risks associated with fluctuations in firewood prices and waste disposal costs, particularly those related to ruminal content.

The primary focus of these studies is on harnessing the potential of burning ruminal content derived from the production process itself. The strategic significance of this fuel source lies in its internal and direct generation during the slaughter process, making it readily available for energy generation within the company's operations. By utilizing rumen as a fuel source to produce energy, Minerva Foods aims to enhance operational efficiency, lower costs, and reduce its environmental impact.

**Estimated timeframe for realization**

1-3 years

**Magnitude of potential impact**

Medium-low

**Likelihood**

Virtually certain

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

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

**Explanation of financial impact figure**

The potential financial impact has not been calculated since the project is under technical feasibility analysis. The calorific value of the material and its potential compared to firewood are being studied, as well as its compatibility with the boiler (verifying whether any adjustments will be necessary).

**Cost to realize opportunity**

**Strategy to realize opportunity**

Minerva Foods' strategy to explore alternative fuel sources, particularly the use of ruminal content from the production process, is aimed at reducing the consumption of firewood and minimizing waste generation. The significance of utilizing rumen as a fuel source lies in its direct and internal generation during the slaughter process, making it an accessible and strategic resource for the company.

The successful implementation of this strategy has already been realized at the Belén unit in Paraguay, where the use of rumen as an alternative fuel has reduced the company's reliance on traditional firewood and decreased waste disposal to third parties. This adoption aligns with Minerva Foods' commitment to minimizing its environmental impact and promoting sustainable practices in its operations.

In Brazil, the project is still in the study phase, where the company is conducting a thorough analysis to determine the environmental impact of this change. One of the key considerations is evaluating whether there may be a potential increase in greenhouse gas (GHG) emissions in the boiler due to burning less renewable material. Simultaneously, the project aims to assess the reduction in waste generation, which can positively contribute to the company's sustainability goals.

As the data analysis and assessment have not been finalized, it is not yet possible to measure the exact financial and environmental impact and potential opportunities. The company is taking a cautious approach, prioritizing the viability of the project, and plans to further study and refine the initiative before implementation. As a result, the project has been postponed to 2023/2024 to ensure thorough evaluation and decision-making.

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## F4. Governance

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### F4.1

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**(F4.1) Is there board-level oversight of forests-related issues within your organization?**

Yes

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#### F4.1a

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**(F4.1a) 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 or committee	Responsibilities for forest-related issues
Board-level committee	The Finance and Risk Committee assists the Board of Directors in monitoring and evaluating the effectiveness of the financial policies applied by the Company, in the fulfillment of its responsibilities, including issuing recommendations to the Board of Directors and Executive body on risks and mitigation strategies, in order to check greater efficiency and quality in the decisions taken by the Board of Directors, as well as in monitoring and evaluating the effectiveness of the policies applied by the Company, including the Risk Management Policy. In addition, the Committee also assists in the implementation of mitigation measures for risk factors to which the Company is exposed, as well as in the analysis of the Brazilian and world economic situation, with its potential effects on the Company's financial, operational, and strategic position. The committee is composed of the CEO, CFO and 5 more committee members.
Chief Executive Officer (CEO)	The Company's CEO acts in making important decisions on forestry issues that may affect the strategy for the expressed long-term goal Commitment to Sustainability (net zero emissions by 2035), business objectives and mobilization of necessary resources. It is the central point of communication between the Company's operations and the Board of Directors and monitors the progress of the plans outlined and indicators of the sustainability agenda.
Chief Operating Officer (COO)	The Chief Operating Officer (COO) implements the Company's strategic plan in each country of operation. The COO is responsible for the departments that purchase cattle and firewood, guiding their actions in accordance with the strategy and the social and environmental criteria adopted by the Company for the acquisition of inputs. The COO reports directly to the Company's CEO, to whom he reports monthly on operational data and indicators, including those related to the purchase of cattle.
Other, please specify (The Sustainability and Innovation Advisory Board)	The Innovation and Sustainability Advisory Board is a non-statutory collegiate advisory body, linked to the Company's Executive Board, responsible for monitoring and discussing practices related to socio-environmental sustainability, corporate governance, and innovation, to provide greater transparency, efficiency, and assertiveness of Minerva Foods initiatives. This board meets monthly and is composed of the CEO, CFO, CTO, HR Director, Legal Director, Institutional Relations Director, Executive Managers of Sustainability, Renove Program and of MyCarbon and 2 independent members.
Other, please specify (Sustainability Commission)	The Sustainability Commission aims to drive the sustainability agenda across the organization and assist in decision-making related to socio-environmental issues. In addition, oversees and guides the execution of the Company's transition to a low carbon economy plan and monitors the progress towards the targets settled at the Commitment to Sustainability. The Committee is composed by CEO, CFO, CTO, HR Director, Legal Director, Institutional Relations Director, Executive Managers of Sustainability, Renove Program and of MyCarbon. This Committee was responsible for the decision to publicly announce Minerva Foods' commitment to the sustainability in April 2021. The main objective of the Company's Commitment to Sustainability is to drive Minerva Foods' transition to a low-carbon economy, achieving carbon neutrality by 2035, 15 years ahead of the Paris Agreement.
Other, please specify (Executive Sustainability Managements)	The Sustainability Executive Managers are subordinated to the Institutional Relations Board and are responsible for identifying and managing risks and opportunities related to social and environmental practices and coordinating the implementation of plans linked to the strategy for the expressed long-term objective Commitment to Sustainability. The Executive Sustainability Management, responsible for the chain traceability front, executes, on a tactical and operational basis, projects and activities to monitor the farms supplying cattle, in accordance with the strategy and socio-environmental criteria adopted by the Company. The Executive Sustainability Management, responsible for the Renove program, executes projects to promote engagement with rural producers in the implementation of regenerative agricultural practices that increase productivity and income, bringing benefits to the environment through low carbon emissions and sustainable intensification of livestock activity.
Other, please specify (Cattle Purchase Managements)	The Cattle Purchasing Managers are subordinate to the Cattle Purchasing and S&OP Board and COO and are responsible for purchasing cattle to supply the Company's operations, observing the socio-environmental criteria established in local policies and legislation.
Other, please specify (Environmental Managements)	The Environmental Managers are subordinated to the Operational Efficiency and Engineering Department and COO and are responsible for the environmental licensing of operations, management of water and effluent treatment, correct disposal of waste, development of efficiency projects for productive resources and energy, including the management of wood consumption for use in the boilers of industrial units.

**F4.1b**

**(F4.1b) 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	Sporadic - as important matters arise	Monitoring implementation and performance Reviewing and guiding risk management policies Reviewing and guiding strategy	The Board of Directors of Minerva Foods is the highest governance body of the Company and is responsible for determining all the guidelines of the strategy of the business areas and monitoring their results, advised by the Finance and Risk Committee. The Committee's competencies include monitoring and evaluating the effectiveness of the Company's financial and risk policies, in order to implement mitigating measures for the risk factors to which the Company is exposed, as well as analyzing the Brazilian and global economic environment, with its potential impacts on the Company's financial, operational and strategic position, considering the potential effects of forestry issues when evaluating the supply chain, and recognizing the vulnerability of natural resources and agricultural inputs, which are essential for the beef industry.

**F4.1d**

**(F4.1d) Does your organization have at least one board member with competence on forests-related issues?**

Row 1

**Board member(s) have competence on forests-related issues**

Yes

**Criteria used to assess competence on forests-related issues**

Minerva Foods has a member of the board of directors who is an Agricultural Engineer from ESALQ/USP (1990) and PhD in Applied Economics from ESALQ/USP (1999). He was a professor at the Department of Economics, Administration and Sociology at ESALQ/USP, in the areas of Macroeconomics, Economic Development and Agricultural Economics, since 1995. He is Professor of Agricultural Economics at Fundação Getúlio Vargas, since 2005. He was a member of the Board of Directors of Fosfertil and is a member of the Board of Directors of the Schoenmaker/Terra Viva Group and the Otávio Lage Group. Member of the External Advisory Committee of EMBRAPA Pecuária Sudeste. Member of the Superior Council of Agribusiness of FIESP. He is Partner-Consultant at MB Agro and Ruralcon Consultoria in Agricultural Management.

**Primary reason for no board-level competence on forests-related issues**

<Not Applicable>

**Explain why your organization does not have at least one board member with competence on forests-related issues and any plans to address board-level competence in the future**

<Not Applicable>

F4.2

**(F4.2) 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)	Forests-related responsibilities of this position	Frequency of reporting to the board on forests-related issues	Please explain
Chief Operating Officer (COO)	Integrating forests-related issues into business strategy	More frequently than quarterly	The Chief Operating Officer (COO) implements the Company's strategic plan in each country of operation. The COO is responsible for the departments that purchase cattle and firewood, guiding their actions in accordance with the strategy and the social and environmental criteria adopted by the Company for the acquisition of inputs. The COO reports directly to the Company's CEO, to whom he reports monthly on operational data and indicators, including those related to the purchase of cattle.
Other, please specify (Sustainability and Innovation Advisory Board)	Assessing future trends in forest risk commodity demand	More frequently than quarterly	The Innovation and Sustainability Advisory Board is a non-statutory collegiate advisory body, linked to the Company's Executive Board, responsible for monitoring and discussing practices related to socio-environmental sustainability, corporate governance, and innovation, to provide greater transparency, efficiency, and assertiveness of Minerva Foods initiatives. This board meets monthly and is composed of the CEO, CFO, CTO, HR Director, Legal Director, Institutional Relations Director, Executive Managers of Sustainability, Renove Program and of MyCarbon and 2 independent members.
Other, please specify (Sustainability Commission)	Assessing forests-related risks and opportunities	More frequently than quarterly	The Sustainability Commission aims to drive the sustainability agenda across the organization and assist in decision-making related to socio-environmental issues. In addition, oversees and guides the execution of the Company's transition to a low carbon economy plan and monitors the progress towards the targets settled at the Commitment to Sustainability. The Committee is composed by CEO, CFO, CTO, HR Director, Legal Director, Institutional Relations Director, Executive Managers of Sustainability, Renove Program and of MyCarbon. This Committee was responsible for the decision to publicly announce Minerva Foods' commitment to the sustainability in April 2021. The main objective of the Company's Commitment to Sustainability is to drive Minerva Foods' transition to a low-carbon economy, achieving carbon neutrality by 2035, 15 years ahead of the Paris Agreement. To achieve this, the Company is working on three major axes: 1. Eco-efficiency in controlled operations; 2. Combating illegal deforestation in the value chain; and 3. Development of the Renove program on partner farms.
Environment/Sustainability manager	Managing forests-related risks and opportunities	More frequently than quarterly	The Executive Sustainability Managements report to the Institutional Relations Board and are responsible for identifying and managing risks and opportunities related to socio-environmental practices and coordinating the implementation of plans linked to the strategy for the long-term objective expressed Commitment to Sustainability. The Sustainability Executive Management, responsible for managing risks and opportunities related to the topic, including climate change, works to implement the Company's strategy to mitigate GHG emissions and disseminate information to stakeholders. The Sustainability Executive Management, responsible for the Renove program, runs projects to promote engagement with rural producers in the implementation of regenerative farming practices that increase productivity and income, in addition to bringing benefits to the environment through low carbon emissions and sustainable intensification of the livestock activity.
Buyers/purchasers	Managing value chain engagement on forests-related issues	More frequently than quarterly	Cattle buyers are subordinated to the Cattle Purchasing Managers, Cattle Purchasing and S&OP Board and COO. They are responsible for mapping opportunities to purchase cattle to supply operations, observing the socio-environmental criteria established in local policies and legislation. They advise suppliers on how they can comply with the Company's socio-environmental purchasing criteria if nonconformities are detected.
Buyers/purchasers	Managing value chain engagement on forests-related issues	More frequently than quarterly	The input buyers are subordinated to the Purchasing Management and COO. They are responsible for mapping opportunities to purchase firewood to supply operations, observing the socio-environmental criteria established in local policies and legislation.

F4.3

**(F4.3) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?**

	Provide incentives for management of forests-related issues	Comment
Row 1	No, and we do not plan to introduce them in the next two years	The goals defined by the Commitment to Sustainability were established by the Sustainability Committee, in which the Company's C-Levels participate.

F4.4

**(F4.4) 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)  
2023 Reference Form\_.pdf  
sustainability-report-2022-minerva-foods\_compressed.pdf

**F4.5**

**(F4.5) Does your organization have a policy that includes forests-related issues?**

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

**F4.5a**

**(F4.5a) Select the options to describe the scope and content of your policy.**

**Row 1**

**Scope**

Company-wide

**Commodity coverage**

Cattle products

**Content**

- Commitment to eliminate conversion of natural ecosystems
- Commitment to no land clearance by burning or clearcutting
- Commitment to eliminate deforestation
- Commitment to remediation, restoration and/or compensation of past harms
- Commitment to resolving both social and environmental issues in own operations and supply chain
- Commitment to protect rights and livelihoods of local communities
- Commitment to transparency
- Commitment to stakeholder awareness and engagement
- Recognition of potential business impact on forests and other natural ecosystems
- List of timebound milestones and targets

**Document attachment**

1  
sustainability-report-2022-minerva-foods\_compressed.pdf

**Please explain**

The main objective is to present the guidelines for the purchase of cattle by Minerva Foods and its subsidiaries on the commitments assumed with the management of the socio-environmental aspects of the supply chain and sustainability, internal standards and standards established by the regulatory bodies of each country of operation. Minerva Foods seeks to ensure that all cattle purchases are made in accordance with the criteria described and presented in the Sustainability Report (page 38, publicly available on our website) with responsibility and integrity, and these criteria may be revised whenever necessary.

Minerva Foods Brasil: the Company requires in the registration and at the time of each negotiation with the potential supplier documents that prove land ownership; it also consults the list of areas embargoed by the Federal Environmental Agency (IBAMA) and the Register of Employers who have subjected workers to conditions analogous to slavery; through a geomonitoring tool, it verifies the occurrence of illegal deforestation, using PRODES as a basis, and the overlap with Conservation Units and Indigenous Lands and quilombola communities. The audit of the monitoring system is carried out annually, with emphasis on Minerva Foods

Minerva Foods Latam: the Company carries out geographical monitoring of its direct suppliers, in accordance with local legislation, for illegal deforestation and overlap with protected areas, indigenous and/or traditional lands, and monitoring of cases of labor analogous to slavery and child labor disclosed in the media or official sources.

The Company was a pioneer in expanding the adoption of geospatial monitoring technology to 100% of direct supplier farms in all biomes (Amazon, Caatinga, Cerrado, Pantanal and Atlantic Forest) in Brazil and, in 2021, completed the implementation of monitoring for 100% of purchases in Paraguay. The same coverage is intended for Colombia (2023), Uruguay (2025) and other countries where Minerva Foods operates in South America (2030). In 2022, the company had more than 90% of its direct suppliers monitored in Argentina and 80% in Colombia. In Uruguay, work began on the study of local socio-environmental legislation, for risk mapping and the start of monitoring its direct suppliers.

**F4.6**

**(F4.6) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?**

Forest risk commodity	Public commitments made
Timber products	Yes
Cattle products	Yes

**F4.6a**

**(F4.6a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?**

Cattle Agreement (TAC)

Other, please specify (Term of Adjustment of Conduct (TAC) with the Public Prosecutor's Office of Pará (2009), Public Commitment of Livestock (2009), Protocol for Monitoring Cattle Suppliers in the Amazon.)

**F4.6b**

**(F4.6b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.**

**Forest risk commodity**

Cattle products

**Criteria**

Avoidance of negative impacts on threatened and protected species and habitats

No conversion of High Conservation Value areas

Secure Free, Prior and Informed Consent (FPIC) of indigenous people and local communities

Adoption of the UN International Labour Organization principles

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

Recognition of legal and customary land tenure rights

**Operational coverage**

Direct operations and supply chain

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

100%

**Cutoff date**

2008

**Forest risk countries/areas that the cutoff date applies to**

Brazil

**Reason for selecting cutoff date**

Legal requirements

**Commitment target date**

2026-2030

**Please explain**

One of the significant risks in the livestock value chain in South America is illegal deforestation, which may or may not be associated with the invasion of indigenous lands and/or traditional communities or environmental protection areas, in addition to labor analogous to slavery. In order to mitigate these socio-environmental risks in 100% of its commercial relations, the Company uses an internal methodology to evaluate documents that prove land ownership, external consultants, technological tools (geomonitoring and applications) and specific national databases, according to the location of operation. In 2021, Minerva Foods announced its Commitment to Sustainability and is working on three major axes to achieve net zero emissions by 2035. The first axis is linked to eco-efficiency in controlled operations, the second to the fight against illegal deforestation in the value chain and the third to the Renove Program, which aims to support partner farms in implementing practices for low carbon emissions.

Regarding the second axis, combating illegal deforestation, the Company was a pioneer in expanding the adoption of geospatial monitoring technology to 100% of direct supplier farms in all biomes (Amazon, Caatinga, Cerrado, Pantanal and Atlantic Forest) in Brazil and, in 2021, completed the implementation of monitoring for 100% of purchases in Paraguay. The same coverage is intended for Colombia (2023), Uruguay (2025) and other countries where Minerva Foods operates in South America (2030). In Colombia and Argentina, implementation is already advanced, with more than 80% of direct supplier farms monitored in the first and 90% in the second country. In Uruguay, Minerva Foods has already begun studies on local legislation to start implementing socio-environmental monitoring in the country. The monitoring criteria used are listed below.

Minerva Foods Brasil: the Company requires in the registration and at the time of each negotiation with the potential supplier documents that prove land ownership; it also consults the list of areas embargoed by the Federal Environmental Agency (IBAMA) and the Register of Employers who have subjected workers to conditions analogous to slavery; through a geomonitoring tool, it verifies the occurrence of illegal deforestation, using PRODES as a basis, and the overlap with Conservation Units and Indigenous Lands and quilombola communities. The audit of the monitoring system is carried out annually, with emphasis on Minerva Foods.

Minerva Foods Latam: the Company carries out geographical monitoring of its direct suppliers, in accordance with local legislation, for illegal deforestation and overlap with protected areas, indigenous and/or traditional lands, and monitoring of cases of labor analogous to slavery disclosed in the media or official sources.

In addition, it is important to mention that monitoring indirect suppliers is currently the biggest challenge in this sector. In this sense, the Company has committed to creating a program to monitor indirect suppliers and monitor them based on the same criteria used for direct suppliers by 2030. A pioneer in the sector, Minerva Foods has begun testing and integrating Visipac, a complementary tool for traceability and monitoring of indirect suppliers in the Amazon, into its internal systems. In addition, through the SMGeo Prospec application, Minerva Foods took another step to engage the entire livestock chain, transferring its monitoring technology into the hands of the rural sector, which has guaranteed the Company the best traceability results among the major players in the sector. producers. Minerva Foods, in partnership with Niceplanet Geotecnologia, developer of the application, is making it easier for rural producers throughout Brazil to verify compliance in their own production chain.

**Forest risk commodity**

Timber products

**Criteria**

Zero gross deforestation/ no deforestation

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

No sourcing of forest risk commodities from unknown/controversial sources

**Operational coverage**

Direct operations and supply chain

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

100%

**Cutoff date**

2006

**Forest risk countries/areas that the cutoff date applies to**

Brazil

Paraguay

Any other countries/areas

**Reason for selecting cutoff date**

Legal requirements

**Commitment target date**

2021-25

**Please explain**

Minerva Foods complies with applicable laws not to purchase timber forest product from illegal deforestation.

**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	11-15	<p>Minerva Foods is a company focused on the foreign market, with approximately 70% of its revenue in 2022 coming from exports, being internationally recognized for supplying premium products in the meat and derivatives sector in more than 100 countries.</p> <p>In order to meet the strictest export requirements to countries such as the United States, members of the European Union, China, among others, it is essential that Minerva Foods' supplier farms invest in cattle with differentiated genetics and breeding, with animal welfare and management practices, pasture and soil management and guarantee of environmental and labor compliance of their operations. This raw material has a higher added value by delivering characteristics that cannot be worked on in the industrial process (maximum age, minimum weight, breed, pH, nutrition, etc.), the quality comes from the field.</p> <p>The Company is also aware of new market requirements, such as the EU Deforestation-free Regulation (EUDR), in which exporting companies will have to demonstrate that the products they sell to the European market have no connection with deforestation. In this sense, Minerva Foods has already been directing efforts to meet these new requirements, aiming to mitigate forest risks in the value chain, which is integrated into the Company's commercial strategy, in order to expand and maintain access to its products to different markets.</p> <p>In 2021, Minerva Foods released its Commitment to Sustainability and works on three major axes to achieve net zero emissions by 2035. The first axis is linked to eco-efficiency in controlled operations, the second to combating illegal deforestation in the value chain and the third to the Renove Program, which aims to support partner farms in implementing low-carbon practices. In the second axis, Minerva Foods' traceability practices adopt the best available technology to ensure the socio-environmental, labor and land regularity of the producer portfolio. The Company was a pioneer in expanding geospatial monitoring technology to 100% of direct supplier farms in all biomes in Brazil and Paraguay. The same coverage is intended for Colombia (2023), Uruguay (2025) and Argentina (2030). Within the Commitment there is also the goal of expanding monitoring to indirect supplier farms by 2030.</p>
Strategy for long-term objectives	Yes, forests-related issues are integrated	11-15	<p>In 2021, Minerva Foods released its Commitment to Sustainability and works on three major axes to achieve net zero emissions by 2035. The first axis is linked to eco-efficiency in controlled operations, the second to combating illegal deforestation in the value chain and the third to the Renove Program, which aims to support partner farms in implementing practices for low carbon emissions. To achieve the long-term objective, the fight against illegal deforestation in the value chain and the evolution of the Renove program are essential and strategic considering that most of the greenhouse gas (GHG) emissions are in the supplier farms (95%, according to the Company's 2022 inventory), a sector characteristic.</p> <p>In the second axis, Minerva Foods' traceability practices adopt the best available technology to ensure the socio-environmental, labor and land regularity of the producer portfolio. The Company was a pioneer in expanding geospatial monitoring technology to 100% of direct supplier farms in all biomes in Brazil and Paraguay. The same coverage is intended for Colombia (2023), Uruguay (2025) and Argentina (2030). Within the Commitment there is also the goal of expanding monitoring to indirect supplier farms by 2030.</p> <p>In the third axis, the Renove program was created to promote engagement and collaborative action with Minerva Foods' cattle ranchers in the implementation of low-carbon cattle ranching. The Renove program is based on three essential components for its execution: Training, Green Finance and Technical and Institutional Partnerships. Capacity building and technical assistance are key to ensure proper implementation and maintenance of regenerative practices on farms over time. The program cultivates partnerships and activities in rural extension, technology transfer and capacity building of rural technicians and farmers. On the Green Finance front, the Renove programme works with financial institutions to enable credit lines and funds that recognize the performance of partner ranchers. On the third component, the program works with renowned institutions in South America to ensure the use of known methodologies with international credibility, scientific backing and innovation.</p>
Financial planning	Yes, forests-related issues are integrated	11-15	<p>Annually, the Company allocates resources to the Sustainability and Livestock Purchase areas to continue the implementation of projects related to the value chain, taking into account socio-environmental criteria for the purchase of animals and goals and objectives linked to the Commitment to Sustainability disclosed in 2021.</p> <p>In the axis of combating illegal deforestation in the value chain, for monitoring direct supplier farms in South America, the annual cost is R\$ 2,000,000.00 on average. It is not yet possible to estimate a cost for the monitoring targets of indirect supplier farms, as several initiatives are still being tested for the entire sector that can make up for the lack of necessary public information. The Company has been distributing vouchers for partner cattle ranchers to use the SMGeo Prospec@ app and has hired a consultancy to prepare a study on the cattle ranching chain in Brazil to obtain more data on the current scenario of the challenge. For both actions, approximately BRL 312,000 was invested in 2022.</p> <p>The Renove program, created to promote engagement with rural producers in the implementation of regenerative agricultural practices that increase productivity and income, in addition to bringing benefits to the environment through low carbon emissions, also has its budget defined annually. In 2022, approximately R\$ 1,800,000.00 was invested in the program.</p> <p>The cattle purchase, in turn, develops events called "Speaking of Livestock", which promotes lectures and meetings to discuss relevant topics for the industry and producers, such as sustainability, inputs, meat quality, among others. The program returned in 2022 and had 12 face-to-face events and the participation of approximately 500 cattle ranchers, in all regions where the company operates, with an investment of more than 110 thousand reais in the organization and holding of events.</p> <p>The Company launched the Carcass Efficiency Program (PEC), which in 2022 reached 1,314 producers. The Program is an initiative created by Minerva Foods, in partnership with Phibro Animal Health and Biogênese Bagó, which aims to help Brazilian livestock to reach a new level of efficiency, through the dissemination of good practices, integration of the various links in the production chain and support for livestock farmers to produce more and better. The investment in the PEC in 2022 was R\$51,000.00.</p>

**F6. Implementation**

**F6.1**

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**(F6.1) Did you have any forests-related timebound and quantifiable targets that were active during the reporting year?**

Yes

**F6.1a**

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**(F6.1a) Provide details of your forests-related timebound and quantifiable target(s) and progress made.****Target reference number**

Target 1

**Forest risk commodity**

Cattle products

**Year target was set**

2021

**Target coverage**

Company-wide

**Target category**

Traceability

**Metric**

% of volume traceable to traceability point

**Traceability point**

Breeding farm

**Third-party certification scheme**

&lt;Not Applicable&gt;

**Base year**

2021

**Base year figure**

0

**Target year**

2030

**Target year figure**

100

**Reporting year figure**

74

**% of target achieved relative to base year [auto-calculated]****Target status in reporting year**

Underway

**Is this target linked to a commitment?**

Zero net/gross deforestation

**Please explain**

The Company has been expanding the adoption of geospatial monitoring technology to direct supplier farms. In Brazil and Paraguay, 100% of farms are monitored. The same coverage is planned for Colombia (2023), Uruguay (2025) and other countries in South America (2030). Colombia and Argentina already have advanced implementation, 80% and 90%, respectively. Studies have already started in Uruguay.

Minerva Foods Brazil: the Company requires documents proving land ownership in the registration and at each negotiation with the potential supplier; it also consults the list of areas embargoed by the Federal Environmental Agency (IBAMA) and the Register of Employers who have subjected workers to conditions analogous to slavery; through a geomonitoring tool, it verifies the existence of illegal deforestation, using PRODES as a basis, and the overlap with Conservation Units and Indigenous Lands and quilombola communities. The audit of the monitoring system is carried out annually. The Company maintains the best performance, among the major players in the market, for the third consecutive year, in the third-party audit carried out by the Federal Public Prosecutor's Office in Pará, the main and most reliable socio-environmental verification tool in the Brazilian economy production chain. The results of the audit carried out in 2021 showed that of the total of 78,990 animals acquired, 100% come from properties that meet all the criteria of the Federal Public Prosecutor's Office's Conduct Adjustment Term (TAC). This took into account the transactions carried out by Minerva Foods between July 2019 and June 2020. Since 2013, the Company has maintained 100% compliance with the audits of the Public Livestock Commitment. The evaluation of the results was approved by BDO RCS Auditores Independentes.

Minerva Foods Latam: the Company carries out geographical monitoring of its direct suppliers, in accordance with local legislation, for illegal deforestation and overlap with protected areas, indigenous and/or traditional lands, and monitoring of cases of labor analogous to slavery and child labor disclosed in the media or official sources. In Paraguay, a third-party audit was carried out following the guidelines aligned with the International Finance Corporation (IFC) for monitoring purchases in the country. For the third time, the performance achieved was 100% compliance.

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**Target reference number**

Target 2

**Forest risk commodity**

Cattle products

**Year target was set**

2021

**Target coverage**

Other, please specify (Supply chain)

**Target category**

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Engagement with indirect suppliers

**Metric**

% of indirect suppliers engaged

**Traceability point**

<Not Applicable>

**Third-party certification scheme**

<Not Applicable>

**Base year**

2021

**Base year figure**

0

**Target year**

2030

**Target year figure**

100

**Reporting year figure**

0

**% of target achieved relative to base year [auto-calculated]**

**Target status in reporting year**

Underway

**Is this target linked to a commitment?**

Zero net/gross deforestation

**Please explain**

To address the challenge of monitoring indirect supplier farms, Minerva Foods has set a goal in its Commitment to Sustainability to establish a program for this purpose and to apply the criterion of zero illegal deforestation in the purchase of animals also considering indirect suppliers by 2030.

Minerva Foods Brasil: in a pioneering way in the sector, the Company started to test and integrate into its internal systems a complementary traceability and monitoring tool for indirect suppliers in the Amazon, Visipeç®. The tool cross-references information from the property's Rural Environmental Registry (CAR) with public databases, when available, to track the movement of cattle in their production cycle. Visipeç® was developed by the National Wildlife Federation (NWF) in partnership with the Gibbs - Land-Use and Environment Lab at Wisconsin-Madison University. It is currently managed by NWF. Tests with the tool showed more than 98% compliance with the good practice criteria defined by the Indirect Suppliers Working Group (GTFI). It is worth mentioning that, currently, the tool is structured to relate direct suppliers to level 1 indirect suppliers, however, studies and analyzes are being carried out to verify the possibility and needs for the tool to encompass the other levels of the supply chain. Minerva Foods has taken the next step in the evolution of the engagement of the entire livestock chain through the transfer of monitoring technology. This is the objective of the SMGeo Prospec® application, in partnership with Niceplanet Geotecnologia, which is bringing the tool to rural producers throughout Brazil, giving them the possibility to consult the compliance of their supply chain. The tool allows producers to conduct detailed research, with access to socio-environmental compliance histories and analysis, helping them to map risks before carrying out any commercialization.

Minerva Foods has been focusing its efforts on training its direct suppliers on the importance of using the tool through workshops, field visits and sending guidance materials, in addition to actively participating in working groups that discuss this issue. To date, the Company has distributed more than 800 vouchers for free to use the application.

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**Target reference number**

Target 3

**Forest risk commodity**

Cattle products

**Year target was set**

2021

**Target coverage**

Company-wide

**Target category**

Engagement with direct suppliers

**Metric**

% of direct suppliers engaged

**Traceability point**

<Not Applicable>

**Third-party certification scheme**

<Not Applicable>

**Base year**

2021

**Base year figure**

0

**Target year**

2030

**Target year figure**

0

**Reporting year figure**

0

**% of target achieved relative to base year [auto-calculated]**

&lt;Calculated field&gt;

**Target status in reporting year**

Underway

**Is this target linked to a commitment?**

Other environmental commitments

**Please explain**

Minerva Foods is committed to sourcing 50% of animal volume from suppliers participating in the Renove Program by 2030, which aims to implement sustainable and low-carbon practices. This is in line with our long-term goal to become "net zero" by 2035. The program aims to support cattle farmers with technical assistance, access to financing and access to the voluntary carbon market.

The goal is relevant due to the high representativeness of the agricultural sector in greenhouse gas emissions. The Renove Program addresses mitigation practices in land use and land use change and forestry. The measure of success is livestock production with reduced emissions generated. Of the total purchases in 2022, 6.07% of the animals commercialized came from farms participating in the Renove Program.

In the LATAM Certification Project, in partnership with Imaflora, we launched a study on the carbon balance in 5 farms in each country where Minerva Foods operates, totaling 25 farms. According to the study, these farms emit on average 44% less than the emissions intensity of global cattle production. Three of these farms were found to have a higher GHG removal than their emissions, having a negative carbon balance. The results were presented at the UN World Climate Conference (COP26) and Minerva Foods was the first and currently the only company in the sector to integrate and report its project on Imaflora's Carbon on Track platform. Through the Renove Program, Minerva Foods exported carbon neutral meat to customers in several countries, from its industrial operations in Brazil and Uruguay.

In the Carbon Project, in partnership with Biophilic Ambipar Environment, Renove is making pioneering progress in generating carbon credits from agriculture in Brazil. Cooperation agreements have been signed with livestock suppliers of Minerva Foods, ratifying the interest in converting conventional livestock management practices into regenerative practices that increase productivity and remove or reduce greenhouse gas (GHG) emissions. Through partnerships with major input companies, financing and technological innovation, we seek to expand the project in the coming years.

**Target reference number**

Target 4

**Forest risk commodity**

Timber products

**Year target was set**

2021

**Target coverage**

Company-wide

**Target category**

Other, please specify ( Efficiency)

**Metric**

Other, please specify (Absolute number)

**Traceability point**

&lt;Not Applicable&gt;

**Third-party certification scheme**

&lt;Not Applicable&gt;

**Base year**

2021

**Base year figure**

0

**Target year**

2022

**Target year figure**

0.11

**Reporting year figure**

0.11

**% of target achieved relative to base year [auto-calculated]****Target status in reporting year**

Achieved

**Is this target linked to a commitment?**

Not linked to specific commitment

**Please explain**

Minerva Foods Brazil: in order for food to be produced in compliance with sanitary standards, part of the process requires hot water to maintain the sterilization of equipment and utensils, cooking of by-products, etc. Without steam generation, there is no way to ensure sterilization and non-contamination of products. In order to optimize and achieve greater efficiency in the use of natural resources, the Company has set a target for the intensity of the use of wood as fuel (ton of steam generated/ton of finished product). If a deviation from the target is detected, the condition of the equipment is reviewed and necessary maintenance is carried out. The indicator is monitored weekly.

Minerva Foods Brazil: the target was reached in 2022. The Company requires from all suppliers of native firewood of its Brazilian operations the Forest Origin Document (DOF), established by MMA Ordinance No. 253, of August 18, 2006, which constitutes a mandatory license for the transportation and storage of forest products of native origin, including native charcoal. All wood extracted in national territory must be certified and must have the Forest Origin Document (DOF), established by MMA Ordinance No. 253, of August 18, 2006. For suppliers of exotic species such as eucalyptus, rubber or orange trees, it is necessary to present a certificate of regularity from IBAMA.

**Target reference number**

Target 5

**Forest risk commodity**

Timber products

**Year target was set**

2021

**Target coverage**

Company-wide

**Target category**

Other, please specify ( Efficiency)

**Metric**

Other, please specify (ton steam/TPA)

**Traceability point**

&lt;Not Applicable&gt;

**Third-party certification scheme**

&lt;Not Applicable&gt;

**Base year**

2021

**Base year figure**

0

**Target year**

2022

**Target year figure**

0.18

**Reporting year figure**

0.15

**% of target achieved relative to base year [auto-calculated]****Target status in reporting year**

Achieved

**Is this target linked to a commitment?**

Not linked to specific commitment

**Please explain**

Minerva Foods Latam: in order for food to be produced in compliance with sanitary standards, part of the process requires hot water to maintain the sterilization of equipment and utensils, cooking of by-products, etc. Without steam generation, there is no way to ensure sterilization and non-contamination of products. In order to optimize and achieve greater efficiency in the use of natural resources, the Company has set a target for the intensity of the use of wood as fuel (ton of steam generated/ton of finished product). If a deviation from the target is detected, the condition of the equipment is reviewed and necessary maintenance is carried out. The indicator is monitored weekly.

Minerva Foods Latam: the target set was 0.187 tons steam/TPA in 2022, and the average of the indicator in the operational units was 0.155 tons steam/TPA. In Latam operations, a document containing authorization to cut, sell and transport firewood is required. For Uruguayan operating units, the legislation (Forestry Development Law No. 15.939) recommends that the company selling the firewood (eucalyptus) has a "Sociedad" (like a CNPJ), which would eliminate the risk of purchasing in indigenous or preserved areas.

For plants in Paraguay, all firewood used is eucalyptus and the legislation (Law 422/73) says that the provider must be registered with the National Forestry Institute, which also guarantees that it is not firewood from preserved areas.

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**Target reference number**

Target 6

**Forest risk commodity**

Timber products

**Year target was set**

2006

**Target coverage**

Company-wide

**Target category**

Traceability

**Metric**

% of volume traceable to traceability point

**Traceability point**

Forest management unit

**Third-party certification scheme**

&lt;Not Applicable&gt;

**Base year**

2006

**Base year figure**

0

**Target year**

2022

**Target year figure**

100

**Reporting year figure**

100

**% of target achieved relative to base year [auto-calculated]**

**Target status in reporting year**

Achieved

**Is this target linked to a commitment?**

Zero net/gross deforestation

**Please explain**

The main activity of Minerva Foods is the production of fresh beef and sheep meat and its derivatives. The Company distributes chilled and frozen fresh meat to the domestic and foreign markets, and processed products from cooked, roasted and grilled meats. In order to be produced in compliance with sanitary standards, part of the process requires hot water to maintain the sterilization of equipment and utensils, cooking of by-products, etc. Without the generation of steam, there is no way to guarantee the sterilization and non-contamination of the products. In its production units, the main fuel for steam production is logs. Exotic species such as eucalyptus are used, as well as native species according to the region.

Minerva Foods Brasil: the Company requires all suppliers of native firewood for its Brazilian operations to obtain the Forest Origin Document (DOF), established by MMA Ordinance No. 253, of August 18, 2006, which constitutes a mandatory license for the transportation and storage of forest products of native origin, including native charcoal. All wood extracted in national territory must be certified and must have the Forest Origin Document (DOF), established by MMA Ordinance No. 253, of August 18, 2006. For suppliers of exotic species such as eucalyptus, rubber or orange trees, it is necessary to present a certificate of regularity from IBAMA.

Minerva Foods Latam: in Latam operations, a document containing authorization for cutting, sale and transportation is required.

For the operating units in Uruguay, the legislation (Forestry Development Law No. 15.939) recommends that the company selling the firewood (eucalyptus) has a "Sociedad" (like a CNPJ), which would eliminate the risk of purchasing in indigenous or preserved areas.

For plants in Paraguay, all firewood used is eucalyptus and the legislation (Law 422/73) states that the provider must be registered with the National Forestry Institute, which also ensures that it is not firewood from preserved areas.

Minerva Foods Australia: wood is not used as fuel in the boilers of the industrial units.

**F6.2**

**(F6.2) 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?	Supply chain coverage	Description of traceability system	Exclusions	Description of exclusion
Timber products	Yes	Volume from direct and indirect suppliers	<p>Minerva Foods Brasil: the Company requires all suppliers of native wood for its Brazilian operations to have the Forest Origin Document (DOF), established by MMA Ordinance No. 253, of August 18, 2006, which constitutes a mandatory license for the transportation and storage of forest products of native origin, including native charcoal. All wood extracted in national territory must be certified and must have the Forest Origin Document (DOF), established by MMA Ordinance No. 253, of August 18, 2006. For suppliers of exotic species such as eucalyptus, rubber or orange trees, it is necessary to present a certificate of regularity from IBAMA.</p> <p>Minerva Foods Latam: in Latam operations, a document containing authorization for cutting, sale and transportation is required. For the operating units in Uruguay, the legislation (Forestry Development Law No. 15.939) recommends that the company selling the firewood (eucalyptus) has a "Sociedad" (like a CNPJ), which would eliminate the risk of purchasing in indigenous or preserved areas. For plants in Paraguay, all firewood used is eucalyptus and the legislation (Law 422/73) states that the provider must be registered with the National Forestry Institute, which also ensures that it is not firewood from preserved areas.</p> <p>Minerva Foods Australia: wood is not used as fuel in the boilers of the industrial units.</p>	Not applicable	<Not Applicable>
Palm oil	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

	Do you have system(s) in place?	Supply chain coverage	Description of traceability system	Exclusions	Description of exclusion
Cattle products	Yes	Volume from direct suppliers only	<p>The Company was a pioneer in expanding the adoption of geospatial monitoring technology to 100% of direct supplier farms in all biomes (Amazon, Caatinga, Cerrado, Pantanal and Atlantic Forest) in Brazil and, in 2021, completed the implementation of monitoring for 100% of purchases in Paraguay. The same coverage is intended for Colombia (2023), Uruguay (2025) and other countries where Minerva Foods operates in South America (2030). In Colombia and Argentina, implementation is already advanced, with more than 80% of direct supplier farms monitored in the first and 90% in the second country. In Uruguay, Minerva Foods has already begun studies on local legislation to start implementing socio-environmental monitoring in the country.</p> <p>Minerva Foods Brazil: the Company requires documents proving land ownership in the registration and at the time of each negotiation with the potential supplier; it also consults the list of areas embargoed by the Federal Environmental Agency (IBAMA) and the Register of Employers who have subjected workers to conditions analogous to slavery; through a geomonitoring tool, it verifies the occurrence of illegal deforestation, using PRODES as a basis, and the overlap with Conservation Units and Indigenous Lands and quilombola communities. The audit of the monitoring system is carried out annually, with emphasis on Minerva Foods. The Company maintains the best performance, among the major players in the market, in the third-party audit carried out by the Federal Public Prosecutor's Office in Pará, in which it obtained 100% compliance. The Company has also maintained 100% compliance, since 2013, with the audits of the Public Livestock Commitment. The evaluation of the results was approved by BDO RCS Auditores Independentes.</p> <p>Minerva Foods Latam: the Company conducts geographical monitoring of its direct suppliers, in accordance with local legislation, for illegal deforestation and overlap with protected areas, indigenous and/or traditional lands, and monitoring of cases of labor analogous to slavery and child labor disclosed in the media or official sources. In Paraguay, a third-party audit was carried out following the guidelines aligned with the International Finance Corporation (IFC) for monitoring purchases in the country. For the third time, the performance achieved was 100% compliance.</p>	Country/geographical area	<p>To address the challenge of monitoring indirect supplier farms, Minerva Foods has set a goal in its Commitment to Sustainability to establish a program for this purpose and to apply the criterion of zero illegal deforestation in the purchase of animals also considering indirect suppliers by 2030.</p> <p>Minerva Foods Brasil: in a pioneering way in the sector, the Company started to test and integrate into its internal systems a complementary traceability and monitoring tool for indirect suppliers in the Amazon, Visipec®. The tool cross-references information from the property's Rural Environmental Registry (CAR) with public databases, when available, to track the movement of cattle in their production cycle. Visipec® was developed by the National Wildlife Federation (NWF) in partnership with the Gibbs - Land-Use and Environment Lab at Wisconsin-Madison University. It is currently managed by NWF. Tests with the tool showed more than 98% compliance with the good practice criteria defined by the Indirect Suppliers Working Group (GTFI). It is worth mentioning that, currently, the tool is structured to relate direct suppliers to level 1 indirect suppliers, however, studies and analyzes are being carried out to verify the possibility and needs for the tool to encompass the other levels of the supply chain.</p> <p>Minerva Foods has taken the next step in the evolution of the engagement of the entire livestock chain through the transfer of monitoring technology. This is the objective of the SMGeo Prospec® application, in partnership with Niceplanet Geotecnologia, which is bringing the tool to rural producers throughout Brazil, giving them the possibility to consult the compliance of their supply chain. The tool allows producers to conduct detailed research, with access to socio-environmental compliance histories and analysis, helping them to map risks before carrying out any commercialization.</p> <p>Minerva Foods has been focusing its efforts on training its direct suppliers on the importance of using the tool through workshops, field visits and sending guidance materials, in addition to actively participating in working groups that discuss this issue. To date, the Company has distributed more than 800 vouchers for free to use the application.</p>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Cocoa	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Coffee	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

## F6.2a

### (F6.2a) Provide details on the level of traceability your organization has for its disclosed commodity(ies).

Forest risk commodity	Point to which commodity is traceable	Countries/areas to which this traceability point applies	% of total production/consumption volume traceable
Cattle products	Fattening farm	Brazil	100
Cattle products	Fattening farm	Paraguay	100
Cattle products	Fattening farm	Argentina	90
Cattle products	Fattening farm	Colombia	80
Timber products	Tree plantation	Brazil	100
Timber products	Tree plantation	Paraguay	100
Timber products	Tree plantation	Uruguay	100

## F6.3

### (F6.3) Have you adopted any third-party certification scheme(s) for your disclosed commodity(ies)?

	Third-party certification scheme adopted?	% of total production and/or consumption volume certified
Timber products	No, we have not adopted any third-party certification schemes for this commodity	<Not Applicable>
Palm oil	<Not Applicable>	<Not Applicable>
Cattle products	Yes	16
Soy	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>
Other - Cocoa	<Not Applicable>	<Not Applicable>
Other - Coffee	<Not Applicable>	<Not Applicable>

**(F6.3a) Provide a detailed breakdown of the volume and percentage of your production and/or consumption by certification scheme.****Forest risk commodity**

Cattle products

**Third-party certification scheme**

Other, please specify (SISBOV)

**Chain-of-custody model used**

Not applicable

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

24

**Form of commodity**

Beef

**Volume of production/ consumption certified**

412793.28

**Metric for volume**

Other, please specify (Percentage of volume purchased )

**Is this certified by more than one scheme?**

Yes

**Is embedded soy certified through this scheme?**

&lt;Not Applicable&gt;

**Please explain**

The Brazilian System for Individual Identification of Cattle and Buffaloes (SISBOV) is the official system for individual identification of cattle and buffaloes, and adherence by rural producers is voluntary, except when its mandatory nature is defined in a specific normative act, or required by official sanitary controls or programs. Currently, MAPA Normative Instruction No. 51, of October 1, 2018, approves, in the form of its Annex III, the operational standard that is used to support the official Brazilian certification for countries that require the individual traceability of cattle and buffalo, until there is approval by MAPA and the implementation of a voluntary adherence traceability protocol that deals with art. 7 of Decree No. 7,623, of November 22, 2011. European countries require this type of certification for meat originating in Brazil. In 2022, 24% of Brazilian cattle were traceable through the SISBOV system.

**Forest risk commodity**

Cattle products

**Third-party certification scheme**

Other, please specify (Organic Certification )

**Chain-of-custody model used**

Not applicable

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

8.55

**Form of commodity**

Beef

**Volume of production/ consumption certified**

320976

**Metric for volume**

Other, please specify (Percentage of volume purchased )

**Is this certified by more than one scheme?**

Yes

**Is embedded soy certified through this scheme?**

&lt;Not Applicable&gt;

**Please explain**

Specific international certifications for organic meat production are obtained for units such as Araguaína (TO), Barretos (SP), Janaúba (MG), José Bonifácio (SP), Palmeiras de Goiás (GO) and Paranatinga (MT) in Brazil. When qualified, these units are subject to strict traceability controls that follow the European Community Regulations No. 834/2007 and No. 889/2008 and the National Organic Program (NOP) of the United States. Plants in Paraguay and Uruguay are also certified to export organic meat. The animals are guaranteed zero use of antibiotics, growth hormones and animal feed products, as well as high animal welfare standards.

**Forest risk commodity**

Cattle products

**Third-party certification scheme**

Other, please specify (Carbon Neutral)

**Chain-of-custody model used**

Not applicable

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

0.73

**Form of commodity**

Beef

**Volume of production/ consumption certified**

27476

**Metric for volume**

Other, please specify (Percentage of animals commercialized)

**Is this certified by more than one scheme?**

Yes

**Is embedded soy certified through this scheme?**

&lt;Not Applicable&gt;

**Please explain**

In 2022, for the first time, Minerva Foods exported certified Carbon Neutral Beef through the Renove program, from the units in Brazil and Uruguay, to customers in the United States, Spain, Italy, and Chile. The greenhouse emissions of participating ranches, industrial units and logistics operations were audited and certified, having received the seal of CO2 Neutral by an independent organization with certification system in over 100 countries. The emissions offsets required to achieve carbon neutrality were provided by MyCarbon in the form of carbon credits generated through tree planting and forest preservation projects.

In Uruguay, of the country's percentage of animals purchased, 5.08% of the volume was certified carbon neutral, in Brazil it was around 0.27%.

**F6.4****(F6.4) For your disclosed commodity(ies), do you have a system to control, monitor, or verify compliance with no conversion and/or no deforestation commitments?**

	A system to control, monitor or verify compliance	Comment
Timber products	Yes, we have a system in place for our no conversion and/or deforestation commitments	<Not Applicable>
Palm oil	<Not Applicable>	<Not Applicable>
Cattle products	Yes, we have a system in place for our no conversion and/or deforestation commitments	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>
Other - Cocoa	<Not Applicable>	<Not Applicable>
Other - Coffee	<Not Applicable>	<Not Applicable>

**F6.4a****(F6.4a) Provide details on the system, the approaches used to monitor compliance, the quantitative progress, and the non-compliance protocols, to implement your no conversion and/or deforestation commitment(s).****Forest risk commodity**

Cattle products

**Operational coverage**Direct operations  
Supply chain**Description of control systems**

Minerva Foods Brasil: the Company requires documents proving land ownership in the registration and at the time of each negotiation with the potential supplier; it also consults the list of areas embargoed by the Federal Environmental Agency (IBAMA) and the Register of Employers who have subjected workers to conditions analogous to slavery; through a geomonitoring tool (SMGeo Direto), it verifies the occurrence of illegal deforestation, using PRODES as a basis, and the overlap with Conservation Units and Indigenous Lands and quilombola communities.

Minerva Foods Latam: the Company conducts geographic monitoring of its direct suppliers (SMGeo Direto), in accordance with local legislation, for illegal deforestation and overlap with protected areas, indigenous and/or traditional lands, and monitoring of cases of labor analogous to slavery and child labor disclosed in the media or official sources.

**Monitoring and verification approach**Geospatial monitoring tool  
Ground-based monitoring system  
Community-based monitoring  
First-party verification  
Second-party verification**% of total volume in compliance**

100%

**% of total suppliers in compliance**

100%

**Response to supplier non-compliance**Retain & engage  
Suspend & engage**% of non-compliant suppliers engaged**

&lt;Not Applicable&gt;

**Procedures to address and resolve non-compliance with suppliers**

Developing time-bound targets and milestones to bring suppliers back into compliance  
Providing information on appropriate actions that can be taken to address non-compliance  
Re-integrating suppliers back into supply chain based on the successful and verifiable completion of activities  
Minerva-Foods-Commitment-with-Sustainability.pdf

**Please explain**

Minerva Foods uses best available technology in its traceability practices to ensure compliance with environmental, labor and land tenure regulations within its portfolio of producers. The Company carries out geospatial monitoring of 100% of direct suppliers in all biomes in Brazil.. In 2021 the implementation of monitoring for 100% of purchases in Paraguay was concluded. The objective is to achieve the same range of coverage for Colombia (2023), Uruguay (2025) and all other countries in which Minerva operates in South America (2030).

Geospatial monitoring ensures that cattle purchased by Minerva Foods do not originate from properties with illegally deforested areas; possess environmental embargoes; are overlapping with indigenous lands and/or traditional communities and conservation units; and are not associated with the use of labor analogous to slavery.

Audit of the monitoring system is conducted annually, with Minerva Foods achieving outstanding results. In 2021 demonstrated that 100% of the animals originated from properties that follow all criteria of the Termo de Ajustamento de Conduta (TAC) under the Federal Public Ministry. Company has maintained a 100% compliance, since 2013, on audits of the Livestock Public Commitment and in Paraguay, the third-party audit with 100% compliance was conducted to monitor purchases in the country. Both evaluations of the results was approved by BDO RCS Auditores Independentes, reinforcing the robustness of its monitoring system.

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**Forest risk commodity**

Timber products

**Operational coverage**

Supply chain

**Description of control systems**

Minerva Foods Brasil: the Company requires all suppliers of native wood for its Brazilian operations to have the Forest Origin Document (DOF), which constitutes a mandatory license for the transportation and storage of forest products of native origin, including native charcoal. For suppliers of exotic species such as eucalyptus, rubber or orange trees, it is necessary to present a certificate of regularity from IBAMA.

Minerva Foods Latam: a document containing authorization for cutting, sale and transportation is required. For operating units in Uruguay, the legislation (Forestry Development Law No. 15.939) recommends that the company selling the firewood (eucalyptus) has a "Sociedad", in order to eliminate risk of purchasing in indigenous or preserved areas.

In Paraguay, all firewood used is eucalyptus and the legislation (Law 422/73) states that the provider must be registered with the National Forestry Institute, which also ensures that it is not firewood from preserved areas.

**Monitoring and verification approach**

First-party verification  
Second-party verification

**% of total volume in compliance**

100%

**% of total suppliers in compliance**

100%

**Response to supplier non-compliance**

Retain & engage  
Suspend & engage

**% of non-compliant suppliers engaged**

<Not Applicable>

**Procedures to address and resolve non-compliance with suppliers**

Providing information on appropriate actions that can be taken to address non-compliance

**Please explain**

Minerva Foods Brazil: for the purchase of native wood, there is documentary verification of all related purchases, while for the purchase of exotic wood, the documentation is consulted in the supplier's register. DOFs are analyzed for all shipments of firewood arriving at the company.

Minerva Foods Latam: the purchase of wood follows only if the suppliers are in compliance with the documentary analysis. In Paraguay, the monitoring of the presentation of documents is done annually (sending the documentation of payment of fees and the Certificate of Registration in Infona where the type of firewood and the cubic meters authorized to be sold are established). In the event of non-compliance with the documents, the supplier will not be able to supply to any unit until they are regularized.

Minerva Foods Australia: wood is not used as fuel in the boilers of the industrial units.

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F6.5



**(F6.5) Indicate if you collect data regarding your own compliance and/or the compliance of your suppliers with the Brazilian Forest Code, and provide details of your methods and progress.**

	Do you collect data on this indicator?	Percentage compliance with indicator	Method(s) for collecting data	Frequency of collecting data
% of owned and/or managed properties registered on the Rural Environmental Registry (CAR) database, with active status	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
% of owned and/or managed properties with Legal Reserve (RL) and/or Permanent Protected Area (APP) deficit	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
% of owned and/or managed properties with signed Terms of Commitment of the Environmental Regularization Program (PRA)	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
% of owned and/or managed properties with no gross deforestation after July 2008	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
% of suppliers registered on the Rural Environmental Registry (CAR) database, with active status	Yes	100%	National tools and databases CAR database Satellite imagery Internal monitoring Supplier documentation Supplier audits Independent audits	More frequently than annually
% of suppliers with Legal Reserve (RL) and/or Permanent Protected Area (APP) deficit	Yes	100%	CAR database Satellite imagery Internal monitoring External consultants Supplier documentation Supplier audits	More frequently than annually
% of suppliers with signed Terms of Commitment of the Environmental Regularization Program (PRA)	No, but we plan to collect data on this indicator within the next two years	<Not Applicable>	<Not Applicable>	<Not Applicable>
% of suppliers with no gross deforestation after July 2008	Yes	100%	Satellite imagery Internal monitoring External consultants Independent audits	More frequently than annually

## F6.6

**(F6.6) For your disclosed commodity(ies), indicate if you assess your own compliance and/or the compliance of your suppliers with forest regulations and/or mandatory standards.**

	Assess legal compliance with forest regulations	Comment
Timber products	Yes, from suppliers	<Not Applicable>
Palm oil	<Not Applicable>	<Not Applicable>
Cattle products	Yes, from both suppliers and owned/managed land	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>
Other - Cocoa	<Not Applicable>	<Not Applicable>
Other - Coffee	<Not Applicable>	<Not Applicable>

## F6.6a

**(F6.6a) For your disclosed commodity(ies), indicate how you ensure legal compliance with forest regulations and/or mandatory standards.**

## Timber products

### Procedure to ensure legal compliance

Minerva Foods Brasil: the Company requires all suppliers of native wood for its Brazilian operations to have the Forest Origin Document (DOF), established by MMA Ordinance No. 253, of August 18, 2006, which constitutes a mandatory license for the transportation and storage of forest products of native origin, including native charcoal. All wood extracted in national territory must be certified and must have the Forest Origin Document (DOF), established by MMA Ordinance No. 253, of August 18, 2006. For suppliers of exotic species such as eucalyptus, rubber or orange trees, it is necessary to present a certificate of regularity from IBAMA.

Minerva Foods Latam: a document containing authorization for cutting, sale and transportation is required.

For operating units in Uruguay, the legislation (Forestry Development Law No. 15.939) recommends that the company selling the firewood (eucalyptus) has a "Sociedad" (like a CNPJ), which would eliminate the risk of purchasing in indigenous or preserved areas.

For plants in Paraguay, all firewood used is eucalyptus and the legislation (Law 422/73) states that the provider must be registered with the National Forestry Institute, which also ensures that it is not firewood from preserved areas.

Minerva Foods Australia: wood is not used as fuel in the boilers of the industrial units.

### Country/Area of origin

Brazil  
Paraguay

### Law and/or mandatory standard(s)

Forest Law - Paraguay  
Other, please specify (Portaria MMA n° 253, de 18 de agosto de 2006 in Brazil; Uruguai - Ley de Desarrollo Forestal N° 15.939; Brazilian Forest Code)

### Comment

Brazilian legislation institutes a mandatory license for the transportation and storage of forest products of native origin, including native charcoal. For Uruguay and Paraguay, there are laws governing forest plans. Therefore, in order to cut, sell, buy, etc., you must follow the specifications of each country's law, but in both countries the laws are clear and require that there be environmental authorization for the cutting, transportation and sale of this wood. After a survey carried out by the corporate legal department together with third party law firms, it was concluded that for the operating units in Uruguay, due to the purchase continuing to be from small producers, the document that is required is called in the country "Sociedad" which is the applicable legal instrument, which by understanding is nothing more than the RUC, similar to the CNPJ in Brazil. This document implies that the producer has been legally registered by the regulatory bodies of the country for the activity carried out and, if the provider is registered for the sale of eucalyptus, it proves that all firewood sold is specific to eucalyptus and that its planting was not carried out in a protected area or indigenous lands. 100% of these small suppliers are registered.

## Cattle products

### Procedure to ensure legal compliance

Minerva Foods Brasil: the Company requires documents proving land ownership in the registration and at the time of each negotiation with the potential supplier; it also consults the list of areas embargoed by the Federal Environmental Agency (IBAMA) and the Register of Employers who have subjected workers to conditions analogous to slavery; through a geomonitoring tool (SMGeo Direto), it verifies the occurrence of illegal deforestation, using PRODES as a basis, and the overlap with Conservation Units and Indigenous Lands and quilombola communities.

Minerva Foods Latam: the Company carries out geographic monitoring (SMGeo Direto) of its direct suppliers, in accordance with local legislation, for illegal deforestation and overlap with protected areas and indigenous and/or traditional lands, and monitoring of cases of labor analogous to slavery and child labor disclosed in the media or official sources.

### Country/Area of origin

Argentina  
Brazil  
Colombia  
Paraguay

### Law and/or mandatory standard(s)

General assessment of legal compliance  
Forest Law - Argentina  
Forest Law - Paraguay  
Other, please specify (Brazilian Forest Code)

### Comment

Minerva Foods has initiatives involving engagement in landscape/landscape approaches. One of these is the Public Livestock Commitment (PLC). Assumed in 2009, together with the Environmentalist Organization Greenpeace, the CPP is committed to monitoring purchases of cattle from the Amazon Biome, thus ensuring that they are not traded with farms that have some type of environmental restriction. Another initiative was adherence to the Conduct Adjustment Term (TAC) also in 2009 with the MPF, expanding the Company's actions to not trade with cattle suppliers from the Amazon Biome that present socio-environmental irregularities, especially suppliers located in the State of Pará (Brazil).

The audit of the monitoring system is carried out annually, with emphasis on Minerva Foods. The Company maintains the best performance, among the major players in the market, for the third consecutive year, in the third-party audit carried out by the Federal Public Prosecutor's Office in Pará, the main and most reliable socio-environmental verification tool in the Brazilian economy production chain. The results of the audit carried out in 2021 showed that of the total of 78,990 animals acquired, 100% come from properties that meet all the criteria of the Federal Public Prosecutor's Office's Conduct Adjustment Term (TAC). This took into account the transactions carried out by Minerva Foods between July 2019 and June 2020. Since 2013, the Company has maintained 100% compliance with the audits of the Public Livestock Commitment. The evaluation of the results was approved by BDO RCS Auditores Independentes.

Minerva Foods, in partnership with Niceplanet Geotechnology, conducts the geospatial monitoring of its direct suppliers' farms in Paraguai, Argentina and Colombia, ensuring that the cattle purchased by the Company complies with local laws. Minerva Foods achieved 100% of its direct suppliers monitoring in Paraguai in 2021 and, in 2022, 100% compliance was attained in the third third-party audit, conducted following the guidelines aligned with the International Finance Corporation (IFC) for monitoring purchases in the country. Audit reports are public and can be accessed on the Minerva Foods website. By the end of 2022, the Company achieved more than 90% of monitoring of its direct suppliers in Argentina and 80% in Colombia.

## F6.7

**(F6.7) Are you working with smallholders to support good agricultural practices and reduce deforestation and/or conversion of natural ecosystems?**

	Are you working with smallholders?	Type of smallholder engagement approach	Smallholder engagement approach	Number of smallholders engaged	Please explain
Timber products	Yes, working with smallholders	Other	Other, please specify (Local supplier prioritization)	52	<p>Minerva Foods' supply area demonstrates a proactive approach in seeking business opportunities and supporting small producers who are in close proximity to the unit. The company's strategy of prioritizing local suppliers is driven by the goal of reducing transportation costs and promoting sustainability in its supply chain.</p> <p>However, one challenge faced by the supply area is the volume of firewood required for the operations. As a small producer may not have the capacity to meet the full demand of firewood, the supply area looks for solutions by sourcing from multiple small producers to fulfill the required volume. This approach allows Minerva Foods to maintain its commitment to supporting local producers while ensuring a steady supply of firewood for its operations.</p> <p>By collaborating with multiple small producers, Minerva Foods not only supports local economies but also enhances resilience in its supply chain. This diversified sourcing strategy mitigates the risk of relying solely on a single supplier, ensuring a continuous supply of firewood to meet the operational needs.</p>
Palm oil	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Cattle products	Yes, working with smallholders	Capacity building	Offering on-site technical assistance and extension services Disseminating technical materials Organizing capacity building events Supporting smallholders to clarify and secure land tenure		<p>Minerva Foods' engagement strategy with smallholders involves several programs and initiatives aimed at supporting and assisting producers in adopting good production practices. Here are the approximate average numbers of smallholders engaged in each of these topics:</p> <ol style="list-style-type: none"> <li>1. PEC (Carcass Efficiency Program): The program reached approximately 1,314 producers in 2022, including small, medium, and large-scale livestock farmers. PEC focuses on identifying the best carcass profiles to meet the demands of the high-quality meat market and encourage the adoption of best production practices. It is a collaborative initiative in partnership with Phibro Animal Health and Biogênese Bagó, aimed at enhancing the efficiency of Brazilian livestock through the integration of various links in the production chain.</li> <li>2. "Trust Bond" Relationship Program: Approximately 3,800 suppliers were registered in the mailing list at the end of 2022. The program shares technical materials on quality, production, and sustainable livestock development. It engages suppliers through information dissemination in various formats like text, video, and infographics. Additionally, "Talking about Livestock" events are organized, which are face-to-face meetings and lectures discussing relevant topics in the industry, such as sustainability, meat quality, inputs, etc. In 2022, around 500 cattle ranchers participated in these events across all regions where Minerva Foods operates.</li> <li>3. SMGeo Prospec Application: In 2021, Minerva Foods launched the SMGeo Prospec application in partnership with Niceplanet Geotecnologia. This app enables rural producers throughout Brazil to analyze the compliance of their supply chain through socio-environmental assessments. Launch workshops were conducted to assist ranchers in using the application and managing their operations more sustainably.</li> <li>4. Renove Program: Rural producers participating in the Renove Program receive training on good agricultural practices, technical assistance in implementing practices like Crop-Livestock-Forest Integration (ILPF), and the recovery of degraded pastures. The program involves monitoring activities using satellite images, soil analysis, and on-site verification. Moreover, the integration of native forest conservation and reforestation activities may potentially generate carbon credits for rural producers.</li> </ol>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Cocoa	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Coffee	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

**F6.8**

**(F6.8) Indicate if you are working with your direct suppliers to drive action on forests-related issues and if so, provide details of the engagement.**

**Forest risk commodity**

Timber products

**Are you working with direct suppliers?**

Yes, working with direct suppliers

**Action(s) on forests-related issues driven by engagement**

Other, please specify (Local supplier prioritization )

**Type of engagement**

Other

**Details of engagement**

Other, please specify (Local supplier prioritization )

**Description of engagement**

Minerva Foods' supply area is dedicated to seeking business opportunities and giving priority to small producers located in close proximity to the processing units. This approach takes into account the reduction in the value of firewood due to transportation costs. The company recognizes that purchasing firewood from local producers can help mitigate expenses related to logistics and transportation.

However, a challenge arises when the required volume of firewood exceeds what a single small producer can supply. To address this issue, the supply area adopts a collaborative approach by sourcing firewood from multiple small producers. By doing so, Minerva Foods ensures that the necessary volume of firewood is available to meet the demands of the processing units, while also supporting local smallholders.

The commitment to sourcing 100% of firewood from direct suppliers located in the local area emphasizes Minerva Foods' focus on promoting local partnerships and supporting small producers within the region of operation.

**% of suppliers engaged by procurement spend covered by engagement**

100

**Explain the impact of your engagement on the selected action**

Indeed, Minerva Foods' strategy of prioritizing local small producers for the purchase of firewood has multiple positive impacts. By sourcing firewood from nearby suppliers,

the company can significantly reduce transportation costs, which directly contributes to cost savings in its operations. This cost reduction ultimately benefits the company's financial performance.

Furthermore, engaging with local small producers fosters economic development in the region where the Company operates. By supporting and collaborating with these producers, Minerva Foods helps to stimulate local economies, create employment opportunities, and improve the livelihoods of rural communities.

Moreover, the emphasis on working with local suppliers aligns with the company's sustainability goals. It reduces the carbon footprint associated with transportation and supports more responsible sourcing practices by promoting regional supply chains.

**Is this engagement helping your suppliers engage with their suppliers on the selected action?**

Unknown

**Does this engagement contribute to achieving a reported target?**

No

**Forest risk commodity**

Timber products

**Are you working with direct suppliers?**

Yes, working with direct suppliers

**Action(s) on forests-related issues driven by engagement**

Ending deforestation and/or conversion of other ecosystems

**Type of engagement**

Capacity building

**Details of engagement**

Offering on-site training and technical assistance

Disseminating technical materials

Organizing capacity building events

**Description of engagement**

Minerva Foods' engagement strategy with livestock producers is focused on assisting them in adopting good production practices, enhancing the value of livestock raw materials, and optimizing their earnings. This strategy includes providing technical assistance and extension services to support farmers in improving their operations.

One key initiative in this engagement strategy is the Carcass Efficiency Program (PEC). Launched in 2022, the program has reached 1,314 producers, encompassing small, medium, and large livestock farmers. The primary objective of the PEC is to meet the expectations of the discerning market for superior quality meat. By working closely with livestock farmers and understanding the demands of the meat industry and consumers, the program aims to identify the best carcass profiles for distribution to both internal and external markets. In doing so, the PEC seeks to recognize and promote the adoption of the best production practices by farmers.

The Carcass Efficiency Program is a collaborative initiative between Minerva Foods, Phibro Animal Health, and Biogênese Bagó. Through this partnership, the program strives to elevate Brazilian livestock to a new level of efficiency by disseminating good practices, integrating various stakeholders in the production chain (including ranchers, the meat industry, input suppliers, and research institutions), and providing support to farmers to enhance productivity and quality.

It's worth noting that the program has covered 20% of the total volume of livestock farmers, indicating the progress made in engaging a significant portion of the company's suppliers.

**% of suppliers engaged by procurement spend covered by engagement**

20

**Explain the impact of your engagement on the selected action**

Minerva Foods' primary engagement strategy with livestock producers revolves around supporting them in adopting good production practices, enhancing the value of livestock raw materials, and optimizing their earnings. The company also provides technical assistance in the field and extension services to assist farmers in improving their operations.

A significant initiative in this engagement strategy is the Carcass Efficiency Program (PEC), which was launched by Minerva Foods in 2022 and successfully reached 1,314 livestock producers, including small, medium, and large farmers. The PEC program is designed to work closely with livestock farmers who are keen on meeting the demanding market requirements for superior quality meat. By adapting to the needs of the meat industry and aiming to fulfill the growing demands of discerning consumers, the program focuses on identifying the best carcass profiles for distribution to both domestic and international markets. The PEC program aims to recognize and promote the adoption of best production practices among the participating farmers.

Minerva Foods collaboratively developed the Carcass Efficiency Program in partnership with Phibro Animal Health and Biogênese Bagó. The initiative's ultimate objective is to enhance the efficiency of Brazilian livestock farming by disseminating good practices, integrating various stakeholders within the production chain (including ranchers, the meat industry, input suppliers, and research institutions), and providing support to farmers to boost productivity and overall output quality.

As of the year 2022, the program has covered 20% of the total volume of livestock farmers. This indicates a significant progress in engaging a substantial portion of the company's suppliers in the program.

**Is this engagement helping your suppliers engage with their suppliers on the selected action?**

Yes

**Does this engagement contribute to achieving a reported target?**

No

**Forest risk commodity**

Cattle products

**Are you working with direct suppliers?**

Yes, working with direct suppliers

**Action(s) on forests-related issues driven by engagement**

Ending deforestation and/or conversion of other ecosystems

**Type of engagement**

Supply chain mapping

#### Details of engagement

Developing or distributing supply chain mapping tool

#### Description of engagement

Minerva Foods' main engagement strategy focuses on supporting livestock producers in adopting good production practices, enhancing the value of livestock raw materials, and optimizing their earnings. The Company offers technical assistance in the field and extension services to assist farmers in improving their operations and overall sustainability.

One of the engagement programs implemented by Minerva Foods is the "Speaking of Livestock" (FP) program. Through this initiative, the Company shares technical materials on various aspects of livestock farming, including quality, production, and sustainable development. By the end of 2022, approximately 3,800 suppliers were registered in the program's mailing list, receiving 19 technical contents in various formats such as text, video, and infographics. The program also engages with cattle ranchers through events like "Talking about Livestock," which includes lectures and meetings aimed at discussing topics relevant to the industry and producers, such as sustainability, inputs, and meat quality. In 2022, the program successfully organized 12 face-to-face events, with the participation of approximately 500 cattle ranchers across all regions where the company operates. This represents engagement with around 7% of the total volume of ranchers.

Another significant initiative is the SMGeo Prospec, an application developed in partnership with Niceplanet Geotecnologia. The SMGeo Prospec app enables rural producers throughout Brazil to access socio-environmental analyses of their supply chains. The Company has been conducting engagement workshops with cattle ranchers to promote the adoption of good practices and assist them in using the application for more sustainable management. So far, more than 800 vouchers have been distributed to prioritize the suppliers with the highest volumes initially. The company is still mapping the total number of suppliers covered by this initiative

#### % of suppliers engaged by procurement spend covered by engagement

7

#### Explain the impact of your engagement on the selected action

Minerva Foods is actively engaging its direct suppliers and providing training on the use of SMGeo Prospec® in their operations. The Company conducts workshops, lectures, webinars, and events like "Talking about Livestock" to foster discussions between the industry and livestock farmers on various relevant topics such as sustainability, animal welfare, and productivity, among others.

During these meetings, Minerva Foods guides ranchers on the significance of using the SMGeo Prospec® application and its benefits for the entire supply chain. The Company also emphasizes its commitment to combat climate change and illegal deforestation in meat production in South America through the adoption of good practices.

To strengthen the engagement and understanding of the challenges faced by livestock farmers, Minerva Foods conducts field visits to the farms. These visits allow for better communication and explanation of the supplier monitoring process in the beef chain, as well as the dissemination of the developed application. Additionally, the Company collects feedback and insights from the farmers to aid in the planning and development of appropriate actions and strategies. This collaborative approach aims to address the challenges encountered by the livestock farmers and propose the best practices, tools, and processes to ensure sustainable and responsible production in the beef supply chain.

#### Is this engagement helping your suppliers engage with their suppliers on the selected action?

Yes

#### Does this engagement contribute to achieving a reported target?

Yes, please specify target ID(s) (For goals 1 and 2, through the transfer of monitoring technology. For rural producers, the aim is that each member of the cattle chain would be able to assess their sales before making any purchases, ensuring that the entire chain is monitored.)

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#### Forest risk commodity

Cattle products

#### Are you working with direct suppliers?

Yes, working with direct suppliers

#### Action(s) on forests-related issues driven by engagement

Ending deforestation and/or conversion of other ecosystems

#### Type of engagement

Capacity building

Financial and commercial incentives

#### Details of engagement

Offering on-site training and technical assistance

Disseminating technical materials

Investing in pilot projects

Paying higher prices linked to best agricultural practices

Financial incentives for certified products

Long-term contracts linked to forest related commitments

#### Description of engagement

The Renove program is a voluntary initiative developed by Minerva Foods with the goal of promoting sustainable and regenerative practices among rural producers in its supply chain. Through the Renove program, participating producers receive valuable training on good agricultural practices, including the implementation of Crop-Livestock-Forest Integration (ILPF) and the restoration of degraded pastures.

To ensure the effectiveness and progress of these practices, the program utilizes modern monitoring technologies such as satellite images, soil analysis, and on-site verification. This approach allows for precise tracking of the impact of implemented practices and helps in identifying areas for improvement.

One of the significant aspects of the Renove program is its focus on conservation and reforestation efforts. By integrating the conservation of native forests and reforestation activities into the program, Minerva Foods aims to contribute to carbon sequestration and mitigate greenhouse gas emissions. These efforts hold the potential to generate carbon credits for participating rural producers, providing them with an added incentive to embrace sustainable practices.

Minerva Foods is dedicated to driving positive change and advancing sustainability in the agricultural sector. The company's ambitious goal of having 50% of its supplier farms participating in the Renove program by 2030 showcases its commitment to foster a more resilient and environmentally friendly supply chain

#### % of suppliers engaged by procurement spend covered by engagement

6.07

**Explain the impact of your engagement on the selected action**

The Renove program focuses on mitigating land use and land-use change and forestry (LULUCF) practices, with the key performance indicator being the production of cattle with reduced emissions. Under the LATAM Certification Project, in collaboration with Imaflora, it was conducted a study on carbon balance at 25 farms where Minerva Foods operates. According to the study, these farms emit on average 44% less than the global average intensity of cattle production emissions. Additionally, three of these 25 farms have a greater GHG removal than their emissions, resulting in a negative carbon balance. These findings were presented at the COP26 Conference, and Minerva Foods was the first and currently the only company in the sector to integrate and report its project on the Imaflora's Carbon on Track platform. Through the Renove Program, Minerva Foods exported carbon-neutral beef to customers in the United States, Spain, Italy, Chile, and other countries, from its industrial operations in Brazil and Uruguay. For this, the partner farms, the company's industrial units, and logistics operations had their carbon footprints audited and certified with the 'CO2 neutral' seal by an independent organization with certification systems in over 100 countries. The required emissions offsetting to neutralize the entire process was transacted by MyCarbon (a subsidiary of Minerva Foods) through carbon credits from tree planting and forest preservation projects.

Under the Carbon Project, in partnership with Biofíllica Ambipar Environment, the Renove Program is pioneering the generation of carbon credits from agriculture in Brazil. Cooperation agreements have been signed with livestock farmers supplying Minerva Foods, expressing their interest in converting conventional livestock management practices into regenerative practices that increase productivity and remove or reduce greenhouse gas emissions. These farms, located in six Brazilian states, are being evaluated in the field by the program's technical team, with the aim of restoring degraded pastures, implementing integrated systems such as Integrated Crop-Livestock-Forest (ILPF) systems, and using feed additives to reduce enteric methane. To enable these practices, partnerships have been established with large companies committed to this common goal: creating a highly productive agricultural sector with low carbon emissions.

**Is this engagement helping your suppliers engage with their suppliers on the selected action?**

Yes

**Does this engagement contribute to achieving a reported target?**

Yes, please specify target ID(s) (Goal 3, related to the Renove Program )

F6.9

**(F6.9) Indicate if you are working beyond your first-tier supplier(s) to drive action on forests-related issues, and if so, provide details of the engagement.**

**Forest risk commodity**

Cattle products

**Are you working beyond first tier?**

No, not working beyond the first tier

**Action(s) on forest-related issues driven by engagement**

<Not Applicable>

**Type of engagement**

<Not Applicable>

**Details of engagement**

<Not Applicable>

**Description of engagement**

Minerva Foods' Commitment to Sustainability includes a goal to establish a program for monitoring indirect supplying farms and ensure zero illegal deforestation in the purchase of animals, including indirect suppliers, by 2030.

In Brazil, Minerva Foods has taken a pioneering approach by testing and integrating a complementary traceability and monitoring tool called Visipecc® for indirect suppliers in the Amazon region. Visipecc® combines information from the Rural Environmental Registry (CAR) of properties with public databases to monitor the movement of cattle throughout their production cycle. Developed in partnership with the National Wildlife Federation (NWF) and the Gibbs - Land-Use and Environment Lab at Wisconsin-Madison University, the tool has shown over 98% compliance with the criteria of good practices defined by the Working Group of Indirect Suppliers (GTFI). While currently focused on relating direct suppliers with level 1 indirect suppliers, further studies are being conducted to explore the possibility of extending the tool to other levels of the supply chain.

To engage the entire livestock chain in monitoring, Minerva Foods is also working on transferring monitoring technology through the SMGeo Prospec® application. Developed in partnership with Niceplanet Geotecnologia, the application is being made available to rural producers across Brazil, allowing them to access socio-environmental compliance histories and analyses, helping them identify risks before engaging in any commercialization activities.

Minerva Foods is committed to training its direct suppliers on the importance of using the SMGeo Prospec® application through workshops, field visits, and guidance materials. The company actively participates in working groups to discuss and advance the implementation of the tool. To date, more than 800 free vouchers have been distributed to encourage the use of the application by suppliers.

**Explain the impact of your engagement on the selected action**

<Not Applicable>

**Does this engagement contribute to achieving a reported target?**

<Not Applicable>

F6.10

**(F6.10) Do you engage in landscape (including jurisdictional) approaches to progress shared sustainable land use goals?**

	Do you engage in landscape/jurisdictional approaches?	Primary reason for not engaging in landscape and/or jurisdictional approaches	Explain why your organization does not engage in landscape/jurisdictional approaches, and describe plans to engage in the future
Row 1	Yes, we engage in landscape/jurisdictional approaches	<Not Applicable>	<Not Applicable>

**(F6.10a) Indicate the criteria you consider when prioritizing landscapes and jurisdictions for engagement in collaborative approaches to sustainable land use and provide an explanation.**

	Criteria for prioritizing landscapes/jurisdictions for engagement	Explain your process for prioritizing landscapes/jurisdictions for engagement
Row 1	Access to new markets Opportunity to protect and restore natural ecosystems Recognized as priority landscape by credible multi-stakeholder groups Response to regulation Response to voluntary sectoral agreement Risk of deforestation, forests/land degradation, or conversion of other natural ecosystems Risk of biodiversity loss Risk of supplier non-compliance in area Stakeholder/investor request Supply of commodities strategically important	Minerva Foods has several initiatives focused on engagement in landscape/jurisdictional approaches to promote sustainability and environmental responsibility.  One of these initiatives is the Public Livestock Commitment (CPP), which was established in partnership with the Environmentalist Organization Greenpeace on October 5, 2009. Under this commitment, Minerva Foods monitors its cattle purchases from the Amazon Biome to ensure that it does not source from farms with environmental restrictions or subjected to blockage. The company also refrains from dealing with suppliers listed on the "dirty list" for their involvement in using slave labor conditions.  Another important engagement initiative is the Conduct Adjustment Term (TAC) signed with the Federal Public Ministry of Pará on July 7, 2009. The TAC expands Minerva Foods' actions to avoid trading with cattle suppliers in the Amazon Biome that have socio-environmental irregularities, particularly in the State of Pará. This commitment aligns with the principles of the Federal Constitution of 1988, aiming to protect an ecologically balanced environment and guide social and economic relations related to the exploitation of natural resources.  As part of its commitment to ecological restoration, Minerva Foods joined the Floresta Viva program, an initiative led by the National Bank for Economic and Social Development (BNDES). Through this partnership, the company contributes to the restoration of degraded areas in the states of Rondônia, Mato Grosso, and Goiás.  Additionally, Minerva Foods supports the Sustainable Calves Production Protocol, a program by IDH - The Sustainable Trade Initiative. The protocol facilitates the traceability of Brazilian livestock production from calves to final consumers, ensuring inclusion, transparency, and data protection. By working collaboratively with IDH, Minerva Foods aims to promote the adoption of more sustainable models in the livestock chain and provide end consumers with information about the socio-environmental attributes of beef products.

**(F6.10b) Provide details of your engagement with landscape/jurisdictional approaches to sustainable land use during the reporting year.**

**Landscape/Jurisdiction ID**

LJ1

**Country/Area**

Brazil

**Name of landscape or jurisdiction area**

Brasil

**Types of partners engaged in the initiative design and implementation**

- International civil society organization(s)
- Financial institution(s)
- International company(ies)
- National/local company(ies)
- Direct supplier(s)
- Academics/ researchers

**Type of engagement**

Partner: Shared responsibility in the implementation of multiple goals

**Goals supported by engagement**

- Avoided deforestation/conversion of natural ecosystems and/or decreased degradation rate
- Increased and/or maintained protected areas
- Promotion of transparency, participation, inclusion, and coordination in landscape policy, planning, and management
- Increased adoption of sustainable production practices (e.g., input use efficiency and water management practices)
- Increased uptake of certification
- Reliable commodity traceability and landscape monitoring/data collection system(s)

**Company actions supporting approach**

- Co-design and develop goals, strategies and an action plan with timebound targets and milestones for the initiative
- Collaborate on management/land use planning in the landscape/jurisdiction
- Collaborate on landscape sustainability assessments through participatory mapping
- Collaborate on establishing and managing monitoring system(s) for deforestation, natural ecosystem conversion and/or degradation
- Help establish a transparent governance platform responsible for managing the initiative and its activities with clear roles, responsibilities and balanced decision-making
- Help establish effective mechanisms for undertaking human rights due diligence, risk management, monitoring, verification, and grievance resolution
- Identify and act on opportunities for pre-competitive collaboration with your sector
- Promote and implement climate change adaptation and mitigation activities
- Implement REDD+ actions in the landscape/jurisdiction
- Capacity building for farmers, smallholders and local communities to implement good agricultural practices (including improved efficiency, crop diversification and adoption of certification)
- Collaborate on commodity traceability
- Finance carbon credits

**Description of engagement**

As part of its unwavering Commitment to Sustainability, Minerva Foods has proudly expressed its support for the Sustainable Calves Production Protocol, an initiative led by IDH - The Sustainable Trade Initiative.

The Sustainable Calves Production Protocol serves as a crucial tool in facilitating the traceability of Brazilian livestock production, encompassing the entire journey from calves to the ultimate consumers. This comprehensive traceability approach is underpinned by the principles of inclusion, transparency, and data protection, ensuring that the entire livestock chain operates with utmost accountability and responsibility.

In collaboration with IDH, Minerva Foods is actively engaged in joint efforts to provide innovative technological solutions that foster the swift adoption of more sustainable practices across the livestock industry. By promoting the integration of these sustainable models, the partnership aims to elevate environmental standards, enhance animal welfare, and prioritize the well-being of communities in the regions where the company operates.

The ultimate goal of this partnership is to empower end consumers with the necessary information and insights about the socio-environmental attributes of beef products, enabling them to make informed and conscientious choices. By reinforcing transparency and accountability throughout the supply chain, Minerva Foods strives to ensure that its customers can confidently embrace products that are produced with the highest standards of sustainability and ethical responsibility.

**Engagement start year**

2022

**Engagement end year**

Not defined

**Estimated investment over the project period (currency)**

**Is a collective monitoring framework used to measure progress?**

No, but we are planning to monitor progress in the next two years

**State the achievements of your engagement so far, and how progress is monitored**

<Not Applicable>

**Landscape/Jurisdiction ID**

LJ2

**Country/Area**

Brazil

**Name of landscape or jurisdiction area**

Amazônia

**Types of partners engaged in the initiative design and implementation**

Subnational government  
International civil society organization(s)  
National civil society organization(s)  
Financial institution(s)  
International company(ies)  
Direct supplier(s)

**Type of engagement**

Partner: Shared responsibility in the implementation of multiple goals

**Goals supported by engagement**

Avoided deforestation/conversion of natural ecosystems and/or decreased degradation rate  
Increased and/or maintained protected areas  
Respect, protect, and fulfil human rights  
Rights to land and resources recognized and protected, and related conflicts reduced

**Company actions supporting approach**

Collaborate on establishing and managing monitoring system(s) for deforestation, natural ecosystem conversion and/or degradation  
Help establish effective mechanisms for undertaking human rights due diligence, risk management, monitoring, verification, and grievance resolution  
Collaborate on commodity traceability

**Description of engagement**

Minerva Foods is firmly committed to actively engaging in landscape and jurisdictional approaches, particularly concerning the preservation and sustainability of the Amazon biome. The company has undertaken two vital initiatives: the Public Livestock Commitment (CPP) and the Term of Adjustment of Conduct of Pará (TAC Pará).

**Engagement start year**

2009

**Engagement end year**

Not defined

**Estimated investment over the project period (currency)**

**Is a collective monitoring framework used to measure progress?**

Yes, progress is collectively monitored using a shared external framework, please specify

**State the achievements of your engagement so far, and how progress is monitored**

Minerva Foods has taken significant steps to engage in landscape/jurisdictional approaches, particularly focusing on the preservation and sustainability of the Amazon biome. Two vital initiatives in this regard are the Public Livestock Commitment (CPP) and the Conduct Adjustment Term (TAC).

The Public Livestock Commitment (CPP) was established through a collaboration with the environmental organization Greenpeace on October 5, 2009. Under this commitment, Minerva Foods proactively monitors its cattle purchases from the Amazon Biome to ensure that it does not engage in trade with farms facing environmental restrictions or blockages. Additionally, the company refrains from dealing with suppliers included in the "dirty list," which relates to those involved in practices akin to slave labor conditions. By embracing the CPP, Minerva Foods actively contributes to environmental preservation and demonstrates its commitment to responsible business practices.

The Conduct Adjustment Term (TAC) was signed on July 7, 2009, in partnership with the Federal Public Ministry of Pará (MPF). This agreement expands the company's efforts in safeguarding the Amazon Biome by pledging not to trade with cattle suppliers in the region that have socio-environmental irregularities, with a particular focus on suppliers located in the State of Pará. In alignment with the precepts of the Federal Constitution of 1988, the TAC actively seeks to protect an ecologically balanced environment while guiding social and economic relations concerning the sustainable use of natural resources.

Minerva Foods, fully aware of its responsibilities, reaffirms its commitment to the TAC and diligently avoids engaging in practices that may be perceived as environmental infractions or crimes. As part of this commitment, the company ensures it does not acquire, intermediate, sell, or transport products of animal or vegetable origin from irregular areas, especially those located in Pará.



F6.10c

(F6.10c) For each of your disclosed commodities, provide details of the production/consumption volumes from each of the jurisdictions/landscapes you engage in.

Indicate landscape/jurisdiction ID	Does any of your commodity production/consumption volume originate from this landscape/jurisdiction, and are you able/willing to disclose information on this volume?	Commodity	% of total production/consumption volume from this landscape/jurisdiction
LJ1	Yes, we do produce/consume from this landscape/jurisdiction, but we are not able/willing to disclose volume data	<Not Applicable>	<Not Applicable>
LJ2	Yes, we do produce/consume from this landscape/jurisdiction, and we are able/willing to disclose volume data	Cattle products	33

F6.11

**(F6.11) Do you participate in any other external activities and/or initiatives to promote the implementation of your forests-related policies and commitments?**

**Forest risk commodity**

Cattle products

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

Yes

**Activities**

Involved in multi-partnership or stakeholder initiatives

**Country/Area**

Brazil

**Subnational area**

Not applicable

**Initiatives**

UN Global Compact

Global Roundtable for Sustainable Beef (GRSB)

Brazilian Roundtable on Sustainable Livestock (GTPS)

Other, please specify (Pacto Nacional pela Erradicação do Trabalho Escravo; Emerging Markets Investor Alliance (EMIA); Responsible Leather Round Table (RLRT);

Grupo de Trabalho de Fornecedores Indiretos (GTFI); Mesa Paraguaya de Carne Sostenible (MPCS); and others)

**Please explain**

Minerva Foods actively engages in various partnerships and coalitions to address critical environmental and sustainability issues, particularly in relation to climate change and deforestation. Notably, the company became a signatory of the United Nations Global Compact in 2021, underscoring its commitment to sustainable development goals and adherence to ten principles encompassing anti-corruption, labor relations, environment, and human rights matters.

As part of its sustainability efforts, Minerva Foods is an active member of significant global initiatives such as the Global Roundtable for Sustainable Beef (GRSB), which brings together experts, academics, and prominent companies from across the world to share best practices in management. The company also plays a role in the Sustainable Livestock Working Group (GTPS), contributing to the mission of promoting sustainable development in Brazilian livestock and addressing sector-specific challenges.

Minerva Foods extends its commitment to sustainability beyond its home country, participating in local initiatives in Colombia and Paraguay through the Global Roundtable for Sustainable Beef (Mesa Paraguaya de Carne Sostenible and Mesa de Ganaderia Sostenible – Colombia). In Colombia, the company collaborates with CIAT (International Center for Tropical Agriculture) to acquire and validate publicly available local data for incorporation into geospatial monitoring efforts.

To ensure responsible supply chain management and uphold human rights, Minerva Foods adheres to the Amazon Cattle Suppliers Monitoring Protocol and is a signatory to important commitments in South America. These include the Public Livestock Commitment, the Conduct Adjustment Term (TAC) with the Public Ministry of Pará, the Brazilian National Pact for the eradication of slave labor, and the Protocol for Monitoring Cattle Suppliers in the Amazon.

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**Forest risk commodity**

Timber products

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

Yes

**Activities**

Involved in multi-partnership or stakeholder initiatives

**Country/Area**

Brazil

**Subnational area**

Not applicable

**Initiatives**

UN Global Compact

Other, please specify (Pacto Nacional pela Erradicação do Trabalho Escravo; Emerging Markets Investor Alliance (EMIA); Responsible Leather Round Table (RLRT);

Grupo de Trabalho de Fornecedores Indiretos (GTFI); Mesa Paraguaya de Carne Sostenible (MPCS); and others)

**Please explain**

Minerva Foods actively engages in partnerships and coalitions to address critical environmental and sustainability challenges, with a focus on climate change mitigation, deforestation prevention, and promoting sustainability within the sector. As part of its commitment to sustainable development, the company became a signatory of the United Nations Global Compact in 2021, formalizing its dedication to the Sustainable Development Goals (SDGs) and adherence to ten principles that encompass anti-corruption, labor relations, environmental protection, and human rights issues.

Participation in the Global Roundtable for Sustainable Beef (GRSB) is a significant aspect of Minerva Foods' engagement efforts. This global initiative brings together experts, academics, and prominent companies from diverse continents to share best practices in beef management. As a member of GRSB, Minerva Foods plays a crucial role in sharing its management practices and contributing to the development of sustainable approaches in the beef industry.

The company is also an active participant in the Sustainable Livestock Working Group (GTPS), where it collaborates in solving the challenges present in the Brazilian livestock sector to promote sustainable development.

Minerva Foods extends its commitment to sustainability beyond its home country, engaging in local initiatives in Colombia and Paraguay, such as the Global Roundtable for Sustainable Beef (Mesa Paraguaya de Carne Sostenible and Mesa de Ganaderia Sostenible – Colombia). In Colombia, the company partnered with CIAT (International Center for Tropical Agriculture) to obtain and validate publicly available local data, contributing to geospatial monitoring efforts.

In its policy, Minerva Foods adopts the Amazon Cattle Suppliers Monitoring Protocol, ensuring responsible supply chain management. The company is also a signatory to crucial commitments focused on supply chain transparency and human rights in South America, including the Public Livestock Commitment, the Conduct Adjustment Term (TAC) with the Public Ministry of Pará, the Brazilian National Pact for the eradication of slave labor, and the Protocol for Monitoring Cattle Suppliers in the Amazon.

**(F6.12) Is your organization supporting or implementing project(s) focused on ecosystem restoration and long-term protection?**

Yes

## F6.12a

**(F6.12a) Provide details on your project(s), including the extent, duration, and monitoring frequency. Please specify any measured outcome(s).****Project reference**

Project 1

**Project type**

Soil carbon sequestration

**Expected benefits of project**

Compliance with certification  
 Compliance with regulation  
 Contribution to SBTi target(s)  
 Disaster risk reduction  
 Improvement to environmental regulation  
 Improvement to soil health  
 Improvement to sustainability of production practices  
 Increase in carbon sequestration  
 Reduce/halt biodiversity loss  
 Reduction of GHG emissions  
 Restoration of natural ecosystem(s)  
 Securing continued supply of agricultural commodities

**Is this project originating any carbon credits?**

Yes

**Description of project**

Minerva Foods is fully committed to achieving carbon neutrality by 2035, and as part of its efforts, the Company launched the Renove program in 2021. This program aims to strengthen and implement sustainable livestock farming practices that promote low-carbon production.

Under the Renove program, two ongoing projects are being implemented:

1. LATAM Certification Project: Through this project, Minerva Foods has been exporting carbon-neutral beef to various international markets, including the United States, Spain, Italy, and Chile, among others. The process involves auditing and certifying the carbon footprints of partner farms, the Company's industrial units, and logistics operations by an independent third party. To neutralize the emissions generated throughout the supply chain, Minerva Foods engages its subsidiary, MyCarbon, to transact carbon credits obtained from tree planting and forest preservation projects.

2. Carbon Project: Renove is making significant strides in the generation of carbon credits from agriculture in Brazil. Technical cooperation agreements have been established with livestock farmers supplying Minerva Foods. The shared goal is to transition from conventional livestock management practices to regenerative approaches that enhance productivity while reducing greenhouse gas emissions, specifically those related to the greenhouse effect. The technical team of the program is conducting on-field evaluations in six Brazilian states, working on activities such as rehabilitating degraded pastures, implementing integrated systems, and introducing food additives in animal feed to curb enteric methane production. To facilitate the implementation of these practices, Minerva Foods has collaborated with prominent input, financing, and technological innovation companies that are equally committed to fostering a highly productive agricultural sector with minimal carbon emissions.

**Where is the project taking place in relation to your value chain?**

Project based elsewhere

**Start year**

2021

**Target year**

2031-2035

**Project area to date (Hectares)**

150000

**Project area in the target year (Hectares)****Country/Area**

Brazil

**Latitude**

-15.616244

**Longitude**

-56.064633

**Monitoring frequency**

Six-monthly or more frequently

**Total investment over the project period (currency)**

4010763

**For which of your expected benefits are you monitoring progress?**

Carbon credits gained  
 More inclusive, transparent, and empowering governance processes  
 Net gain in biodiversity and ecosystem integrity  
 Protection of human rights

Protection of land tenure  
Reduce/halt biodiversity loss  
Reduction of air pollution  
Reduction of GHG emissions  
Restoration of natural ecosystem(s)  
Securing continued supply of agricultural commodities

**Please explain**

Minerva Foods has set a bold target of achieving net-zero carbon emissions by 2035 and has launched the Renove program to contribute to reducing emissions related to scope 3. Renove is a program aimed at implementing low-carbon livestock practices with the company's cattle suppliers. Since its inception in 2021, the program has been actively working on two projects.

Under the LATAM Certification Project, Minerva Foods has successfully obtained carbon-neutral meat certification from its operations in Brazil and Uruguay, which enables the export of carbon-neutral beef to key markets such as the United States, Spain, Italy, and Chile. The CO<sub>2</sub> neutral seal was awarded by an independent organization with certification systems in over 100 countries. The methodology ensures the meticulous measurement of the livestock carbon footprint throughout the entire production process, including farm emissions, industry activities, and all aspects of logistics. To achieve carbon neutrality, MyCarbon, a subsidiary of Minerva Foods, transacts the necessary emissions compensation through carbon credits obtained from tree planting and forest preservation projects.

Within the scope of the Carbon Project, Minerva Foods has made significant strides in pioneering the origination of carbon credits from agriculture in Brazil and is also prospecting the initiation of projects in Paraguay and Colombia. Farms are being assessed on-site by the technical team, focusing on the recovery of degraded pasture, implementation of integrated systems such as Crop-Livestock-Forest Integration, and the use of food additives in animal feed to reduce enteric methane emissions. To make the implementation of these low-carbon practices feasible, the company has forged partnerships in 2022 with large companies, all dedicated to achieving a highly productive agricultural sector with low carbon emissions. Carbon contracts are being prepared and signed with selected farms, and an Action Plan outlines the low-carbon emission practices that will be implemented to generate carbon credits in the future.

Minerva Foods has demonstrated its strong commitment to sustainability and climate action by investing BRL 4,010,763.00 in the Renove program since 2021. Investment budgets for the program's future years are planned annually, reaffirming the company's determination to achieve its ambitious sustainability goals.

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## F7. Verification

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### F7.1

**(F7.1) Do you verify any forests information reported in your CDP disclosure?**

Yes

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### F7.1a

**(F7.1a) Which data points within your CDP disclosure have been verified, and which standards were used?**

**Disclosure module**

F2. Procedures

**Data points verified**

Minerva Foods is a signatory to the Livestock Public Commitment, signed in October 2009, in which minimum criteria were established for the purchase of cattle and beef products on an industrial scale in the Amazon biome. These criteria include rejections of the invasion of indigenous lands and protected areas, modern slavery labor, land grabbing and violence in the countryside, zero illegal deforestation and the adoption of a monitorable, verifiable, and reportable production traceability system. In 2020, the Amazon Supplier Monitoring Protocol was also launched, which aims to harmonize all commitments and TACs assumed by the various market players. All criteria proposed in the Protocol are already implemented by the Company. In Paraguay, a third-party audit is also carried out, following the guidelines established jointly with the International Finance Corporation (IFC), for the definition of socio-environmental criteria and monitoring of purchases in the country.

**Verification standard**

The audit work is carried out in accordance with the NBC TSC 4400 - Work procedures previously agreed on accounting breaches, approved by Resolution CFC No. 1270/10.

**Please explain**

Audit of the monitoring system is conducted annually, with Minerva Foods achieving outstanding results. The Company maintains the best performance, among major players in the market for the third consecutive year, in the third-party audit carried out by the Federal Public Prosecutors's Office in Pará, the main and most reliable tool for social and environmental verification of the Brazilian production chain. The results for the audit conducted in 2021 demonstrated that of the totaled 78.990 animals purchased, 100% originated from properties that follow all criteria of the Termo de Ajustamento de Conduta (TAC) under the Federal Public Ministry. This considered transactions carried out by Minerva Foods between July 2019 and June 2020. The Company has maintained a 100% compliance, since 2013, on audits of the Livestock Public Commitment. The evaluation of the results was approved by BDO RCS Auditores Independentes, reinforcing the robustness of its monitoring system and the Company's continuous efforts towards an increasingly sustainable cattle breeding.

In Paraguay, a third-party audit was conducted by BDO RCS Auditores Independentes following the guidelines aligned with the International Finance Corporation (IFC) for monitoring purchases in the country. For the third time, the performance attained was 100% compliance. Audit reports are public and can be accessed on the Minerva Foods website.

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## F8. Barriers and challenges

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**(F8.1) Describe the key barriers or challenges to eliminating deforestation and/or conversion of other natural ecosystems from your direct operations or from other parts of your value chain.**

**Forest risk commodity**

Cattle products

**Coverage**

Supply chain

**Primary barrier/challenge type**

Lack of regulatory control and enforcement from local governments

**Comment**

The advancement towards eliminating illegal deforestation in all countries of operation poses significant challenges for Minerva Foods. One major obstacle is the limited access or absence of official data to verify other levels of the value chain. Monitoring indirect supplier farms requires substantial investment in tools and technologies, as well as active engagement from the entire value chain to ensure comprehensive traceability of cattle. Individual animal tracking, as successfully implemented in countries like Uruguay, Australia, and New Zealand, is essential for ensuring transparency and accountability in the supply chain.

Minerva Foods recognizes that government involvement is crucial in intensifying inspections to identify environmental crimes and enforce applicable laws that contribute to forest conservation. Government action is particularly vital in controlling indirect suppliers. The responsibility for managing and controlling the movement of animals lies with public authorities. Therefore, it is imperative that industries like Minerva Foods have unrestricted access to all control documents issued by these authorities. To ensure effective traceability, each country's government must promptly develop mechanisms or public platforms that grant access to such documents and pertinent information related to the traceability of animals.

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**Forest risk commodity**

Cattle products

**Coverage**

Supply chain

**Primary barrier/challenge type**

Value chain complexity

**Comment**

The monitoring of indirect suppliers remains one of the major challenges in the livestock sector due to the lack of a comprehensive system that allows complete traceability of cattle. Reliable data to accurately determine the number of indirect suppliers is often unavailable, making it difficult for companies like Minerva Foods to have full access to official documents and information regarding the movement of animals.

In Brazil, Minerva Foods is taking a pioneering approach to address the monitoring of indirect supplying farms. The company has partnered with the National Wildlife Federation and Wisconsin-Madison University to conduct the Visipep test, a complementary tool to their monitoring systems. This tool aims to develop a risk mapping of indirect suppliers in the Amazon and has shown positive preliminary results, with approximately 98.4% compliance with the good practice criteria defined by the indirect suppliers working group (GTFI).

To further enhance monitoring efforts, Minerva Foods has developed and implemented the SMGeo Prospec application in partnership with Niceplanet Geotecnologia. This application allows cattle ranchers to consult and analyze the social and environmental aspects of their respective suppliers before purchasing animals for reproduction, breeding, or fattening. The company has engaged its direct suppliers and trained them in the use of SMGeo Prospec, reinforcing its commitment to combat climate change and illegal deforestation.

For other countries of operation, Minerva Foods aims to develop and achieve the monitoring of indirect suppliers by 2030, in alignment with its commitment to sustainability. The company plans to implement a monitoring program for indirect supplier farms, covering both Brazil and its other operations, to ensure greater transparency and accountability throughout the supply chain.

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**Forest risk commodity**

Cattle products

**Coverage**

Supply chain

**Primary barrier/challenge type**

Lack of adequate traceability systems

**Comment**

Indeed, the lack of accessible and reliable data on the entire cattle traceability chain remains a significant challenge for companies like Minerva Foods in determining the number of indirect suppliers in each country of operation. The management of documents related to the movement of animals and the identification of the farm of origin and destination are typically under the jurisdiction of public bodies and regulatory authorities.

As a result, Minerva Foods, like other companies in the sector, does not have full and direct access to official control systems, making it difficult to verify and track indirect suppliers. This limitation hinders comprehensive traceability efforts and poses challenges in ensuring complete transparency and accountability throughout the supply chain.

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**Forest risk commodity**

Cattle products

**Coverage**

Supply chain

**Primary barrier/challenge type**

Land tenure and insecure property rights issues in sourcing regions

**Comment**

For all countries, the criteria for verification of land tenure and land tenure are applied to all direct suppliers. All documents are submitted to a rigorous analysis by the

company's records sector, which is responsible for the critical analysis and validation of the data. However, for indirect suppliers, there is still a lack of such information, like other companies in the sector, does not have full and direct access to official control systems, making it difficult to verify and track indirect suppliers. This limitation hinders comprehensive traceability efforts and poses challenges in ensuring complete transparency and accountability throughout the supply chain

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**Forest risk commodity**

Cattle products

**Coverage**

Supply chain

**Primary barrier/challenge type**

Cost of sustainably produced/certified products

**Comment**

There are high transaction costs to access certified carbon markets with fees for project registration, monitoring, verification, auditing and credit issuance. While productivity gains from implementing sustainable practices may provide some return on the large investments required to implement such practices, there is the challenge that the costs involved are still very high.

Another issue is the high cost of monitoring livestock to maintain constant traceability of the animal, since in some countries history is required from the age of 10 months. Since the cost is high and the financial return on the sale of the animal is low, the amount of animals traced from a young age has been decreasing.

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**Forest risk commodity**

Timber products

**Coverage**

Direct operations

Supply chain

**Primary barrier/challenge type**

Value chain complexity

**Comment**

The availability of non-native wood in the northern region of Brazil, for the Rolim de Moura and Araguaína units, is scarce, making consumption of native wood a challenge regarding the costs of operations related to input, in view of the dependence on this resource and its variations in price, which directly impact the Company. In addition, the cost to make this substitution for other fuels is very high, which may end up in many cases making this exchange unfeasible.

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**F8.2**

**(F8.2) Describe the main measures that would improve your organization's ability to manage its exposure to deforestation and/or conversion of other natural ecosystems.**

**Forest risk commodity**

Cattle products

**Coverage**

Direct operations

Supply chain

**Main measure**

Greater supplier awareness/engagement

**Comment**

Within the Company's initiatives regarding supplier engagement, one notable program is 'Talking about Livestock', which offers lectures and meetings to foster discussions on relevant topics between the industry and livestock farmers. Subjects such as sustainability, inputs, meat quality, among others, are addressed during these events. In 2022, the program resumed with 12 in-person events and approximately 500 livestock farmers participated, representing all regions of the company's operations. By the end of 2022, around 3,800 suppliers were registered in the mailing list and received 19 technical content pieces in the form of texts, videos, or infographics.

To advance the engagement of the entire livestock chain, Minerva Foods took a significant step by transferring monitoring technology to its suppliers through the SMGeo Prospec® application, developed in partnership with Niceplanet Geotecnologia. This tool allows producers to conduct detailed research and access socio-environmental compliance information, assisting them in assessing risks before engaging in any commercial transactions.

The company's efforts are focused on engaging its direct suppliers and providing training on the use of SMGeo Prospec® through field visits, workshops, lectures, webinars, and events like 'Talking about Livestock', which are gatherings promoted by the company to discuss pertinent issues between the industry and livestock farmers, including sustainability, animal welfare, and productivity. These meetings serve as a platform to guide ranchers on the importance of using the application and its benefits for the entire supply chain. Additionally, Minerva Foods emphasizes its commitment to combating climate change and illegal deforestation in meat production across South America.

In 2022, the company distributed over 800 vouchers for the free use of the application, aiming to increase adoption and utilization among its suppliers, thereby strengthening traceability and sustainability throughout the supply chain.

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**Forest risk commodity**

Cattle products

**Coverage**

Supply chain

**Main measure**

Increased demand for certified products

**Comment**

Higher prices and demand for certified products could provide the necessary financial support for the development and sustainability of certification programs. Implementing and maintaining certification programs often requires significant investments, including costs related to audits, compliance monitoring, and administrative expenses.

However, one of the challenges for ranchers and farmers is the uncertainty regarding the return on investment in certification. While certification demonstrates a commitment to sustainable practices and may open up new markets, there is not always a direct and clear price premium associated with certified commodities. This lack of price differentiation or visible demand for certified products makes it difficult for ranchers to justify the upfront costs of obtaining and maintaining certifications.

**Forest risk commodity**

Cattle products

**Coverage**

Supply chain

**Main measure**

Price premium for certified materials

**Comment**

Higher prices for certified products could provide the necessary financial support for the development and sustainability of certification programs. Implementing and maintaining certification programs often requires significant investments, including costs related to audits, compliance monitoring, and administrative expenses.

However, one of the challenges for ranchers and farmers is the uncertainty regarding the return on investment in certification. While certification demonstrates a commitment to sustainable practices and may open up new markets, there is not always a direct and clear price premium associated with certified commodities. This lack of price differentiation or visible demand for certified products makes it difficult for ranchers to justify the upfront costs of obtaining and maintaining certifications.

**Forest risk commodity**

Cattle products

**Coverage**

Supply chain

**Main measure**

Improvement in data collection and quality

**Comment**

Currently, certain critical data essential for enhancing supply chain monitoring beyond the direct supplier is not publicly accessible. The availability of this data holds the potential to significantly strengthen the monitoring process for the entire supply chain, leading to a considerable reduction in deforestation and mitigating reputational risks.

**Forest risk commodity**

Timber products

**Coverage**

Supply chain

**Main measure**

Development of certification and sustainability standards across entire landscapes/jurisdictions

**Comment**

The best way to help the organization to improve the market environment is by developing certifications in every landscape we operate.

**F17 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.**

**F17.1**

**(F17.1) Provide the following information for the person that has signed off (approved) your CDP forests response.**

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

**Submit your response**

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

English

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

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

**Please confirm below**

I have read and accept the applicable Terms

