COMPARATIVE ANALYSIS OF SUSTAINABLE BEEF PROTOCOLS, PLATFORMS, AND INITIATIVES
The Tropical Forest Alliance is a multi-stakeholder partnership platform initiated to support the implementation of private-sector commitments to remove deforestation from key supply chains. Hosted by the World Economic Forum, our 160+ alliance partners include companies, government entities, civil society, indigenous peoples, local communities, and international organizations, work together through Forest-Positive Collective Action to advance the world’s transition to deforestation-free commodity supply chains.

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EXECUTIVE SUMMARY

The China Meat Association (CMA) released the Specification for Meat Industry Green Trade in December 2021. The document lists specifications to be followed by Chinese companies to promote the green trade of products.

The recent increase of the beef trade between Brazil and China is calling for a reflection towards the sustainability of the system. The aspects of the demand characteristics in China and the supply changes in Brazil involve several stakeholders in the process. Both countries are promoting studies and engagement from each side. To identify baselines of actions and more focused initiatives, it is necessary to go deep in the analysis of the convergences and bottlenecks to advance in a forest positive agenda.

The aim of this study is to identify synergies and alignment opportunities between the CMA specifications and main Brazilian reference documents in sustainable production and sourcing and provides clarity on what the CMA specifications may represent to Brazilian cattle producers and Brazil-China exports.

The CMA Specification for Meat Industry Green Trade criteria are very well aligned with the Accountability Framework Initiative. The CMA criteria are very comprehensive and have a broader scope than the other reference documents considered in this study.

Many of the CMA criteria that are not explicitly aligned with the reference documents can be explained by the fact that the reference documents have different purpose and scope; in other words, it does not necessarily mean that the reference documents do not support the CMA criteria.

The main relevant criteria alignments are related to:
» the requirement of cut-off dates towards zero deforestation and conversion (even though the CMA does not provide guidance on a specific year or date for these commitments)
» respect for human rights, indigenous people, and local communities
» mechanisms to prevent child and slave labor
» monitoring and verification processes
» avoidance and elimination of illegal raw materials from meat trade and beef supply chains
» improve transparency and traceability in supply chain management

The main differences between the CMA specification and the reference documents relate to risk assessment, approach to high-risk areas and suspension and engagement mechanisms. The CMA has several specifications on risk assessment and management while all the reference documents, except for the Accountability Framework Initiative (AFI), cover other specific elements of responsible sourcing and therefore are not focused on risk assessment and management.

On traceability, the CMA requires suppliers to know the origin of raw and auxiliary material to the farm level. The methods presented in the CMA to guarantee traceability to the farm level are aligned with what is proposed in the reference documents, which usually require suppliers to know the last property that the material comes from (through GTAs) and the implementation of monitoring and verification mechanisms so that companies can be sure their supply chains are compliant with their commitments. Moreover, the CMA specifies a green procurement plan...
to avoid risks before purchases; the reference documents do not usually include procurement plans explicitly in their scope.

A main difference identified was the CMA basic requirement 4.9, which states that companies should avoid supplying from high-risk areas, a criterion that would likely cause relevant impacts to Brazilian suppliers since Chinese companies following this guidance would avoid sourcing from the Brazilian Amazon and Cerrado biomes. This is not an approach supported by any of the reference documents, which instead recommend companies engage with their suppliers to address any issues and monitor and verify compliance. All the reference documents analyzed are supportive of a suspension and elimination mechanism with supplier engagement and re-entry criteria to avoid permanent exclusion of suppliers, yet the CMA specification only covers the suspension mechanism.

The Brazilian Forest Code and Normative Instructions analyzed align with the CMA specifications on support for nature conservation and implementation of tools that guarantee traceability in the beef sector such as the Rural Environmental Register (CAR), Animal Transit Guide (GTA), and the Brazilian Bovine and Bubaline Identification and Certification System (SISBOV).

However, the GTA is the only mandatory traceability tool in the country that is adopted for both internal and external markets and only identifies direct cattle suppliers.

On the other hand, Chinese companies can rely on the SISBOV, which provides traceability to farm of birth; this is mandatory for exporting producers and voluntary for internal market. Since, according to the CMA specifications, companies may use a few different methods to assess the origin of raw material, the regulations can support the implementation of the CMA requirements.

Moreover, when assessing differences and common elements between the CMA specifications and two relevant state-level initiatives, IMAC – Instituto Mato-Grossense da Carne and Acripará – Associação de Criadores do Pará, the main point to be highlighted is that the initiatives support suspending suppliers that are not in compliance with company commitments, but they also do support supplier engagement and unblocking rules for supplier reintegration in the supply base. Re-entry criteria is not included in the CMA specifications.

The technification study produced by Scot Consultoria (2021) offers a high-level overview of the Sino-Brazilian meat trade and further research and analysis would be required to understand both the Chinese domestic framework and its correlation with the meat imports scenario. As the technification study did not raise requirements...
and criteria, it was not possible to perform a detailed analysis of its results against the CMA specifications1.

CMA specifications would have relevant implications for Brazilian cattle producers in terms of improvements and investments. These may be classified in four main categories: conservation, restoration, increasing productivity through best practices for production, and improving traceability.

In terms of investments in beef production, the technification study provides estimations on the total cost for renovation of degraded grazing areas 2. However, the technification study does not provide information related to the total amount needed for conservation of native vegetation, restoration, environmental suitability of rural properties, and improving traceability, all of which are important aspects to enable the broad implementation of the CMA requirements in Brazil.

Some of the main demand and supply actors that can influence the dynamics of the trade of cattle-derived products between Brazil and China are Chinese companies, banks, Brazilian meatpackers, Brazilian and Chinese governments, and a few initiatives such as finance bonds. However, no direct incentives from any of these actors to shift the current trade dynamics and guarantee full compliance towards CMA specifications currently exist.

Some organizations in Brazil have been developing and implementing initiatives to incentivize agricultural producers and cattle ranchers to adopt actions to stop deforestation, reduce GHG emissions, improve productivity, comply with the Brazilian Forest Code, among other sustainability actions. As an example, some initiatives3 could potentially be used by demand and supply actors as a way to demonstrate at least partial alignment with the CMA’s Specification for Meat Industry Green Trade were mapped and assessed for this report, as follow: AGRI3 Fund (a partnership between UN Environment and Rabobank), Banco do Brasil, Santander, B3 Corporate Sustainability Index (ISE B3), Protect, Conserve, Include (PCI), and Sustainable and Organic Beef from the Pantanal (PROAPE)4.

The biggest slaughterhouses in Brazil (Minerva, Marfrig and JBS) all have programs and financing to tackle their own goals and commitments announced in recent years. The advances of these three companies show the potential for reducing additional costs to comply with the specific criteria of CMA. On the other hand, the lack of clarity of the timeframe to fully implement their system, and the difference among KPIs and commitments of each meatpacker are limiting conditions to set up a clear assessment of investments and organizational shifts that are actually required.

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1. The scope of the comparative analysis is available on page 12 of this report.
2. Costs vary between R$126.99 billion and R$245.81 billion, depending on the scenario projected.
3. This is not an exhaustive list.
4. The initiatives were identified through a desk-based online survey. Their status as per March 2022 when it comes to providing incentives to the demand and supply actors were not checked.
A China Meat Association (CMA) divulgou as Especificações para o Comércio Verde da Indústria de Carne em dezembro de 2021. O documento lista as especificações a serem seguidas pelas empresas chinesas para promover o comércio verde de produtos.

O recente aumento do comércio de carne bovina entre Brasil e China exige uma reflexão para a sustentabilidade do sistema. Os aspectos das características da demanda na China e as mudanças de oferta no Brasil envolvem diversos atores no processo. Ambos os países estão promovendo estudos e engajamento de cada lado. Para identificar linhas de base de ações e iniciativas mais concretas, é necessário aprofundar na análise das convergências e gargalos para avançar para uma teoria de mudança positiva para as florestas.

O objetivo deste estudo é identificar sinergias e oportunidades de alinhamento entre as especificações do CMA e os principais documentos brasileiros de referência em produção e abastecimento sustentável e esclarecer o que as especificações do CMA podem representar para os pecuaristas brasileiros e para as exportações Brasil-China.

As especificações da CMA para o Comércio Verde da Indústria da Carne estão muito bem alinhadas com a Accountability Framework Initiative. Os critérios da CMA são muito abrangentes e têm um escopo mais amplo do que os critérios existentes nos outros documentos de referência considerados neste estudo. Muitos critérios da CMA não estão explicitamente alinhados com os documentos de referência devido ao fato de que os documentos de referência não os mencionam, mas isso não significa necessariamente que os documentos de referência não apoiam os critérios da CMA.

Os principais alinhamentos de critérios relevantes estão relacionados a:

» exigência de datas de corte para desmatamento e conversão zero (mesmo que a CMA não forneça orientação sobre um ano ou data específica para esses compromissos)
» respeito pelos direitos humanos, povos indígenas e comunidades locais
» mecanismos de prevenção ao trabalho infantil e escravo
» processos de monitoramento e verificação
» requisitos para verificação de terceira parte com objetivo de verificar conformidade
» evitar e eliminar matérias-primas ilegais da cadeia de fornecimento de carne bovina
» melhoria da transparência e rastreabilidade na gestão da cadeia de fornecimento

Algumas das principais lacunas entre as especificações da CMA e os documentos de referência estão relacionadas à avaliação de risco, abordagem de áreas de alto risco e mecanismos de suspensão e engajamento. A CMA tem várias especificações sobre avaliação e gerenciamento de riscos, enquanto todos os demais documentos de referência, exceto a Accountability Framework Initiative - AFi, não mencionam a avaliação e o gerenciamento de riscos como parte do processo de gerenciamento de áreas de fornecimento sustentáveis, uma vez que esses documentos têm diferentes propósitos e orientações.

Com relação à rastreabilidade, a CMA exige que os fornecedores conheçam a origem da matéria-prima ao nível da fazenda, enquanto os documentos de referência não têm tal exigência.
de forma explícita. No entanto, os métodos apresentados na CMA para garantir a rastreabilidade até o nível da fazenda estão alinhados com os métodos contemplados nos documentos de referência, que propõem que os fornecedores conheçam a última propriedade de onde vem a matéria prima (através da GTA), bem como a implementação de mecanismos de monitoramento e verificação para que as empresas possam ter certeza de que suas cadeias de suprimentos estão em conformidade com seus compromissos. Além disso, a CMA especifica um plano de compras verde para evitar riscos antes das compras, e os documentos de referência não incluem explicitamente planos de compras em seu escopo.

Uma das principais diferenças identificadas foi o requisito básico da CMA 4.9, que estabelece que as empresas devem evitar o fornecimento de áreas de alto risco, critério que provavelmente causará impactos relevantes aos fornecedores brasileiros, uma vez que as empresas chinesas que seguirem essa orientação passariam a evitar o abastecimento proveniente dos biomas Amazônia e Cerrado.

Esta não é uma abordagem apoiada por nenhum dos documentos de referência, que por sua vez, recomendam que as empresas se envolvam com seus fornecedores para resolver quaisquer problemas identificados, monitorando e verificando a conformidade. Todos os documentos de referência analisados apoiaram um mecanismo de suspensão e eliminação com critérios de contratação e reentrada de fornecedores para evitar a exclusão permanente de fornecedores, mas apenas o mecanismo de suspensão está previsto nas especificações da CMA.

O Código Florestal Brasileiro e as Instruções Normativas analisadas alinharam-se às especificações do CMA com relação à conservação da natureza e implementação de ferramentas que garantem a rastreabilidade no setor de carne bovina, como o Cadastro Ambiental Rural (CAR), Guia de Trânsito Animal (GTA) e o Sistema Brasileiro de Identificação e Certificação de Origem Bovina e Bubalina (SISBOV). No entanto, o GTA é a única ferramenta de rastreabilidade obrigatória no país (adoptada para o mercado interno e externo), e identifica apenas fornecedores diretos de gado.

Por outro lado, as empresas chinesas podem contar com o SISBOV, que fornece rastreabilidade até a fazenda de nascimento do gado. O SISBOV é obrigatório para os produtores-exportadores e voluntário para o mercado interno. De acordo com as especificações do CMA, as empresas podem combinar métodos diferentes para avaliar a origem da matéria-prima. Dessa forma, tais regulamentos podem apoiar a implementação dos requisitos do CMA no Brasil.

Além disso, ao avaliar as lacunas e elementos comuns entre as especificações do CMA e duas iniciativas estaduais relevantes, IMAC – Instituto Mato-Grossense da Carne e Acripará – Associação de Criadores do Pará, o principal ponto a ser destacado é que essas iniciativas apoiaram a suspensão de fornecedores que não estão em conformidade com os compromissos da empresa, mas também apoiaram o engajamento de fornecedores e regras de desbloqueio para reintegração
O escopo da análise comparativa encontra-se na página 12 deste relatório.

O estudo de tecnificação produzido pela Scot Consultoria (2021) oferece apenas uma visão geral de alto nível do comércio de carnes sino-brasileiro e mais pesquisas e análises seriam necessárias para entender tanto o quadro doméstico chinês, quanto sua correlação com o cenário de importação de carne. Como o estudo de tecnificação não apresenta requisitos e critérios, não foi possível realizar uma análise detalhada de seus resultados frente às especificações do CMA.

A implementação das especificações da CMA teria implicações relevantes para os pecuaristas brasileiros em termos de melhorias e investimentos. Estes podem ser classificados em quatro categorias principais: conservação, restauração, aumento da produtividade através de melhores práticas de produção, e melhoria da rastreabilidade. Em termos de investimentos na produção de carne bovina, o estudo de tecnificação traz estimativas de custo total para renovação de alta tecnologia de áreas de pastagens degradadas.

No entanto, não há informações relacionadas ao valor total necessário para conservação da vegetação nativa, restauração de pastagens e áreas degradadas, adequação ambiental das propriedades rurais e melhoria da rastreabilidade, aspectos importantes para viabilizar a ampla implementação dos requisitos da CMA no Brasil.

Alguns dos principais atores de demanda e oferta que podem influenciar a dinâmica do comércio de produtos derivados de gado entre Brasil e China são empresas chinesas, bancos, frigoríficos brasileiros, governos brasileiro e chinês, e algumas iniciativas como títulos financeiros. No entanto, não existem incentivos diretos de qualquer um desses atores para mudar a atual dinâmica comercial e garantir a conformidade total com relação às especificações da CMA. Algumas organizações no Brasil vêm desenvolvendo e implementando iniciativas para incentivar produtores agrícolas e pecuaristas a adotarem ações para conter o desmatamento, reduzir as emissões de GEE, melhorar a produtividade, cumprir o Código Florestal Brasileiro, entre outras ações de sustentabilidade. Como exemplo, algumas iniciativas que poderiam ser potencialmente utilizadas por atores de demanda e oferta como forma de demonstrar pelo menos um alinhamento parcial com a “CMA's Specification for Meat Industry Green Trade” são: Fundo AGR13 (parceria entre ONU Meio Ambiente e Rabobank), Banco do Brasil, Santander, Índice de Sustentabilidade Empresarial B3 (ISE B3), Proteger, Conservar, Incluir (PCI) e Carne Orgânica e Sustentável do Pantanal (PROAPE).

Os maiores frigoríficos do Brasil (Minerva, Marfrig e JBS) possuem programas e financiamentos para cumprir suas próprias metas e compromissos anunciados nos últimos anos. Os avanços das empresas individualmente mostram o potencial de redução de custos adicionais para atender aos critérios específicos da CMA. Por outro lado, a falta de clareza do prazo para garantir a implementação de seus sistemas, e as diferenças entre KPIs e compromissos de cada frigorífico são condições limitantes para estabelecer uma avaliação clara dos investimentos e mudanças organizacionais que seriam realmente necessárias.
The Tropical Forest Alliance (TFA) is a multi-stakeholder platform hosted by the World Economic Forum focused on reducing commodity-driven deforestation. The TFA works with over 160 different actors from the public, private and civil society sectors to address environmental issues associated with growing food production and protecting forests. The TFA operates regional platforms in Latin America, West and Central Africa, China and Southeast Asia, supported by the Governments of the Netherlands, Norway, Germany and the United Kingdom, as well as the Cargill Foundation and the Gordon and Betty Moore Foundation.

Recently, the increased beef trade between China and Brazil has resulted in engagements from both countries. In Latin America, the TFA’s objective is to support the implementation of private-sector commitments to curb deforestation linked to agricultural commodities. Since 2020, TFA Latin America Commodity Dialogues have been taking place, aiming to build and share collective solutions that can lead to more sustainable outcomes and better business in supply chains. In this context, the Beef Dialogues convened Brazilian and Chinese stakeholders to discuss the opportunities and challenges for Brazil-China collaboration towards more sustainable beef trade relations. The key finding was the link between two important agendas: deforestation-free supply chains and resilient food systems. Research commissioned so far, alongside the Beef Dialogues, have mapped key initiatives and compiled them in the Beef Public Private Roadmap, an aligned framework that is being implemented collectively by key stakeholders involved in the beef supply chain that will serve as guidance for the continuity of the Dialogues in the future.

This report was prepared by Proforest at the TFA’s request with the objective of identifying the main differences and the common elements between the China Meat Association (CMA)’s recently launched Specification for Meat Industry Green Trade and reference documents such as the Accountability Framework Initiative (AFI) and Beef on Track, among others. The secondary objective of this report is to show what the CMA standards mean for Brazilian cattle producers in terms of opportunities and challenges for Brazil-China exports. The results of this analysis will be embedded in the Beef Public Private Roadmap in order to support governments, associations, and companies to take aligned action in positioning an agenda to eliminate deforestation.

INTRODUCTION

The Tropical Forest Alliance (TFA) is a multi-stakeholder platform hosted by the World Economic Forum focused on reducing commodity-driven deforestation. The TFA works with over 160 different actors from the public, private and civil society sectors to address environmental issues associated with growing food production and protecting forests. The TFA operates regional platforms in Latin America, West and Central Africa, China and Southeast Asia, supported by the Governments of the Netherlands, Norway, Germany and the United Kingdom, as well as the Cargill Foundation and the Gordon and Betty Moore Foundation.

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The CMA is the overarching representative body of all participants in the Chinese meat industry, approved by the Chinese Government. It represents major state-owned and privately owned meat companies involved in all aspects of production from slaughtering through to cold stores.

The practical effect of the CMA’s steps on defining broader milestones for a sustainable meat industry both in terms of market scope, enforcement mechanisms and timeline remains unclear. In order to actively respond to the national call for green civilization and ecological construction, the CMA launched a pioneering document in the industry (the Specification for Meat Industry Green Trade). Gao Guan, vice president of the CMA, has stated that the document will only be binding for its member companies.

There is no official or media information about when the document will become mandatory for CMA members. Currently the CMA seems to be recruiting member companies to pilot the specifications. The CMA and WWF jointly published the Chinese version of Specification for Meat Industry Green Trade in May 2021.

At that point the CMA held three seminars in July-September 2021 to help companies to better complete the pilot, understand the pilot implementation process and clarify the use of pilot implementation tools: the Accountability Framework and a tool called the Deforestation/Conversion-Free Toolkit.

It is worth noting here that the 2021 annual summary of the CMA mentioned that the first batch of pilot companies for the group standard of Specification for Meat Industry Green Trade has been announced. However, a list of these pilot companies could not be found on the Internet so far.

As for understanding any sustainable standard or shift that might come out from CMA’s directives and its engagement with the TFA, it is essential to adopt a comprehensive vision of what CMA requirements represent to the Chinese sustainability agenda at both the national and international levels. China has led the Paris-2030 debate and recently held the first round of the Kunming Biodiversity Conference, encompassing concepts such as ecological civilization and community of a shared destiny into its reasoning for public...
policies and investments. Due to the strategic roles of Chinese SOEs (央央) to implement these concepts and corresponding guidelines, a better understanding of their correlation with the CMA and the Chinese sanitary organs (health agencies) are also crucial aspects.

China also included food security in its 14th Five-Year Plan (2021-2025) and included discussions about food safety in its core targets. There is a trend to increase phytosanitary measures; this can cause difficulties for the Brazilian market in terms of time constraints and extra efforts required to comply with these measures. The 2017 and 2021 disruptions of meat imports resulting from a federal police operation (including major meatpackers such as JBS) and the embargo due the violation of the 2015 Sino-Brazilian sanitary protocol are compelling examples in that sense.

Because of the variables mentioned above, diplomatic relationships play a major role in the stability and enhancement of the trade flows between the two countries. Although China has traditionally adopted a pragmatic approach to assure its food supplies, tension between the two countries escalated slightly in 2021, and the political approximation of additional potential suppliers, such as Argentina and Uruguay, might increase risks of reduced market share for the private sector in Brazil. For instance, Fernando Lugris, Ambassador of Uruguay to China, signed a strategic cooperation agreement between the CMA and the National Meat Institute of Uruguay at the CMA’s Meat Development Conference for Trade Development in September 2021.

It is important to bear in mind that understanding China’s domestic meat production is crucial to make an accurate assessment of China potentially increasing its sustainability standards and the resulting impact on main commodity exporters to China. As well as being the second-largest chicken meat-producing country in the world for the past three years, China is a leader in pig production. This domestic supply relies on the imports of soy for feed. Therefore, when setting up sustainability requirements for meat while tackling the whole supply chain, Chinese imports in the sector might have a ripple effect on other commodities.

UNDERSTANDING CHINA’S DOMESTIC MEAT PRODUCTION IS CRUCIAL TO MAKE AN ACCURATE ASSESSMENT OF CHINA POTENTIALLY INCREASING ITS SUSTAINABILITY STANDARDS AND THE RESULTING IMPACT ON MAIN COMMODITY EXPORTERS TO CHINA. AS WELL AS BEING THE SECOND-LARGEST CHICKEN MEAT-PRODUCING COUNTRY IN THE WORLD FOR THE PAST THREE YEARS, CHINA IS A LEADER IN PIG PRODUCTION
The scope of this comparative analysis comprises the following elements:

a. Comparison between the CMA specifications and other reference documents:
   i. Selo Verde Platform (Pará)
   ii. Accountability Framework Initiative (AFI)
   iii. Guide to Sustainable Livestock Indicators (GIPS, in Portuguese)
   iv. Beef on Track Platform (the Monitoring Protocol for Cattle Suppliers in the Amazon - which includes the Terms of Conduct Adjustment (TACs) - and the Audit Protocol for Cattle Commitments in the Amazon)
   v. Voluntary Monitoring Protocol for Cattle Suppliers in the Cerrado
   vi. The Consumer Goods Forum (CGF) Forest Positive Coalition (FPC) Beef Working Group (WG) - Beef Roadmap and Guidance on Forest Positive Supplier for Cattle Derived Products (Meatpackers in Brazil)

b. Analysis of what the CMA specifications mean for Brazilian cattle producers in terms of measures and investment needed.

c. Analysis of the CMA specifications against the technification study results.15

d. Summary of incentives (policy, subsidies, finance mechanisms) that could be potentially used by demand/supply actors.

e. Identification of differences and common elements between the CMA standards and jurisdictional norms and regulations.

f. Based on jurisdictional data and technification study results, run a comparison between the CMA standards and slaughterhouse practices (Minerva, Marfrig and JBS) to determine gaps and implementation costs.
### 3. METHODOLOGY

In order to compare the CMA standards with the AFI, GIPS, Beef on Track, Cerrado Protocol and the CGF FPC Beef WG, as well as to compare the CMA standards with slaughterhouse practices, the following template was used: the criteria of the CMA Specification for Meat Industry Green Trade document were listed in rows, and the reference documents were listed in the columns (Table 1).

<table>
<thead>
<tr>
<th>CMA CRITERIA</th>
</tr>
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<tbody>
<tr>
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</tr>
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</tr>
<tr>
<td>4.3 Company shall continuously increase resources efficiency including water, energy and land, increase product value and utilization, and reduce negative impacts such as GHG emission and pollution in the meat trade.</td>
</tr>
<tr>
<td>4.4 Company shall respect human rights to survival and development, and continuously improve the assurance of rights and benefits for small &amp; medium companies and smallholders in the meat trade.</td>
</tr>
</tbody>
</table>

During the analysis, the cells corresponding to each CMA’s criterion were colored according to their potential alignment with the reference documents. See Table 2 for an explanation of the color code.

<table>
<thead>
<tr>
<th>CMA CRITERIA</th>
<th>AFI</th>
<th>GIPS</th>
<th>...</th>
<th>MARFRIG</th>
<th>MINERVA</th>
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</tr>
</tbody>
</table>

**LEGEND:**
- **PREMISE**
  - CMA criterion and reference document have a high potential alignment: The reference document either encompasses the CMA criterion and most of the definitions are similar in both documents or do not explicitly encompass but have a high potential to do so.
  - CMA criterion and reference document have a potential alignment: The reference document either encompasses the CMA criterion and some of the definitions are similar in both documents or have potential alignment.
  - CMA criterion and reference document have a low potential alignment: The reference document either does not explicitly encompass the CMA criterion or has low potential alignment.

**Note:** For this assessment not only specific reference documents were considered, but also other source of information related to each specific document. For instance, for assessing the CMA criteria against the Voluntary Monitoring Protocol for Cattle Suppliers in the Cerrado, not only the Protocol itself (the document) was assessed, but also other relevant source of information related to the protocol, including upcoming supporting documents.

This analysis also considers the recently published EU proposal for a regulation on deforestation-free products. The complete benchmark is available in the Annex I and a summary per CMA’s topic in the Annex II.
4. KEY FINDINGS: SUMMARY

A) ANALYSIS BETWEEN THE CMA SPECIFICATIONS AND THE REFERENCE DOCUMENTS

There are common specifications that the Specification for Meat Industry Green Trade developed by the China Meat Association shares with the other documents analyzed. The main similarities are as follows:

» Eliminate illegal raw materials
» Improve transparency and traceability in supply chain management
» Good alignment with the Accountability Framework Initiative
» Respect for human rights, indigenous people, local communities, and mechanisms to prevent child and slave labor
» Commitments towards zero deforestation and zero conversion are thoroughly supported; however, some documents may refer only to deforestation
» The importance of cut-off dates to eliminate conversion and deforestation, even though recommendations on the dates may differ within the sector

Many of the reference documents analyzed do not have the same breadth of approach as the CMA requirements do, especially regarding to the following aspects:

» Considering risk assessment as part of conducting sustainable sourcing
» Improve animal welfare
» Free, Prior and Informed Consent (FPIC)
» Consulting the industry about the regulations and policies of the area of source

On the other hand, the reference documents have a more specific approach compared with the CMA requirements when it comes to the points highlighted below:

» Grievance mechanisms for human rights and environmental issues
» Guidance on specific cut-off dates
» Specificities for Brazilian biomes
» Monitoring, Reporting and Verification tools and data sources

Finally, there are three main differences observed in the CMA requirements that would require additional effort from stakeholders involved in the Brazil-China commercial beef trade to align on expectations:

» The CMA’s basic requirement 4.9 suggests that companies should avoid sourcing from high-risk areas, such as the Amazon and Cerrado, which house the majority of cattle production in Brazil
» The CMA requirements do not include the importance of engaging with suppliers and determining re-entry criteria, or unblocking rules, to avoid the permanent exclusion of suppliers in a company’s supply base

» The CMA requirement 5.1.5.2 on suppliers knowing the origin of raw material to the farm level (it is not clear if “the origin of raw materials at farm-level” includes the farms of birth and all the indirect farms within the slaughterhouses’ supply chains. If so, it would require additional effort from stakeholders involved in the Brazil-China commercial beef trade to align on expectations)
The CMA basic requirements reveal that the CMA values some topics that are not explicitly addressed by some reference documents. For example, the topics of resource efficiency, pollution, and animal welfare are listed in the CMA basic requirements; these topics are only included in the GIPS reference document. This does not mean that the other organizations behind the other reference documents are not supportive of these topics; it only means that the topics are not included in the reference documents and therefore were considered as having either potential or low potential alignment.

It is noticeable that the reference documents developed in Brazil, such as GIPS, Beef on Track and the Cerrado Protocol are focused on action within the beef supply chain and therefore do not directly cover a broader approach to work beyond supply chains, such as requiring companies to engage in multi-stakeholder dialogues or in the development of landscape initiatives, for instance. However, those documents were created under a collaboration process involving different actors led by organizations that advocate for multi-stakeholder dialogue, cooperation and consensus building.

Respect for human rights, indigenous people, local communities, and mechanisms to prevent child and slave labor are aligned and widespread among the documents, although none of the reference documents present criteria related to bribery among personnel, like the CMA specification does.

Commitments towards zero deforestation and zero conversion are included in all the documents; however, unlike the CMA specifications, some documents refer to deforestation only and not all kinds of conversion of native vegetation due to their geographic scope an applicability. The importance of cut-off dates to eliminate conversion and deforestation is well known across the beef sector, and this is reflected by this requirement being present in all the docu-

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**Figure 1** shows the percentage of the criteria of the reference documents analyzed in the benchmarking which can be considered to have either high potential alignment, potential alignment, or low potential alignment with the CMA specifications.
ments analyzed. Even though establishing cut-off dates is fully supported by the reference documents, recommendations on the exact dates may differ within the sector. On the other hand, it is still challenging for sector agreements or collective commitments to specify guidance on **target dates** to achieve zero deforestation and zero conversion commitments: they request suppliers to have target dates but don’t specify what these dates; this is the same for the CMA specification.

**Risk assessment and management** are efficient tools to identify environmental and social threats and shed some light on possible ways to minimize negative effects. However, apart from the AFI, most of the reference documents do not mention risk assessment and management explicitly as they are focused on supporting other elements of the responsible sourcing cycle. Yet, they can be used as a tool by any upstream or downstream organization to assess risks in their supply base. There are several other tools and resources available in Brazil to conduct risk assessment and management which have not been included in the scope of analysis of this study. For more information on these tools, refer to the **Briefing Note 2B** of The Beef Toolkit.

One CMA criterion should be highlighted since it has low potential alignment with any of the reference documents analyzed: **the basic requirement 4.9**, which suggests that companies should avoid supplying from high-risk areas, such as the Amazon and Cerrado. None of the reference documents suggest avoiding high-risk areas altogether, as there is an evolving understanding in the sector that there are tools available to reduce and mitigate the risk of sourcing from these areas and that engaging in wider sectoral and landscape initiatives to address the root causes of deforestation in these regions and continuing to source from compliant producers in high-risk regions is more likely to deliver long-term availability of responsible beef. Otherwise, the causes of deforestation are not tackled, and a knock-on effect of supply shortage may arise in the beef sector.

Moreover, all the reference documents analyzed are supportive of a **suspension and elimination mechanism** in accordance with the CMA specification. However, unlike the CMA, the other documents also highlight the importance of engaging with suppliers and determining **re-entry criteria**, or unblocking rules, to avoid the permanent exclusion of suppliers from a company’s supply base.

A main expected difference of the CMA specification is that many of the eligible resources for this analysis are focused on Brazil, which is not the focus of the CMA document. Therefore, the reference documents provide references to useful databases for verification of compliance such as the Brazilian Environmental Rural Registry (CAR in Portuguese), embargoed lists for environmental non-compliance and slave labor, the Brazilian Forest Code, and the Animal Transit Guide (GTA in Portuguese).
On traceability, the CMA requires suppliers to know the origin of raw and auxiliary material to farm level (5.1.5.2) and present a few methods to guarantee traceability to origin (5.1.5.3): a) tracing material to producing units of origin; b) tracing to intermediate suppliers with effective control systems in place; c) utilizing credible assurance systems; d) tracing to jurisdictions or landscapes where performance fulfills the companies’ commitments. The reference documents are supportive of full traceability and are also nuanced regarding data availability on traceability to origin and on existing regulation on information disclosure by suppliers.

The CMA specifies a green procurement plan to avoid risks before purchases. This is somewhat similar to the AFI and CGF FPC Beef WG documents, which require companies to have procurement policies, but not exactly the same requirements. The other reference documents, GIPS, Beef on Track and Cerrado Protocol do not explicitly mention creating or implementing procurement plans, but the documents can still be used by companies within their procurement plans as it has already been happening in some cases in Brazil.

Furthermore, grievance mechanisms for human rights and environmental issues are raised in the reference documents, as well as disclosing them publicly. Grievance mechanisms are not mentioned within the CMA specifications.

All reference documents consider third-party verification to verify compliance, companies’ performance levels and confirm communication and claims. In terms of disclosing information, even though the CMA specification seems to be very aligned with the AFI overall, the CMA standard does not require companies to publicly disclose information on its suppliers like the AFI Core Principle 12.2; it only encourages companies to do so. Information disclosure needs to be approved by the supplier; this is the main reason why the other documents apart from the AFI do not require disclosure of supplier information.

In relation to the managing review and claims criteria covered by the CMA, which includes two topics (one on clarity, truth, and evidence-based claims, and another on proving the source and attributes of reasonable evidence for the statement), none of the reference documents analyzed explicitly establishes principles or provides information about this topic. Yet, since the documents were created under the same principles of “clarity, truth, and evidence-based”, they can be used by companies to make robust claims.

This report also analyzes Selo Verde Pará, which is an open platform developed by the Federal University of Minas Gerais for the state government of Pará, in partnership with the Federal Public Prosecutor’s Office. The platform brings together
data concerning satellite-based deforestation monitoring; indigenous, quilombola and protected areas; legal embargoes; slave labor practices; cattle movement; and legal compliance with the Forest Code. Selo Verde Pará also supports environmentally sound land regularization. Furthermore, by integrating sensitive governmental data the platform can analyze not only direct cattle suppliers but indirect suppliers too.

The Selo Verde Pará platform allows companies to access information about the status of individual farms, checking whether their suppliers comply with the Brazilian Forest Code and assess environmental compliance by implementing transparent traceability of direct and indirect livestock suppliers. The platform has a web-based map (Figure 2) that enables the visualization of consolidated farmlands (deforestation prior to 2008), recent deforestation post 2008, hydrology and required Riparian Permanent Protection areas (APPs) of more than 230 thousand individual farms in Pará’s CAR. When the user selects a specific farm, the platform provides the farm’s CAR code as well as a summary of its land use history, including environmental debts and deforestation.

Although Selo Verde Pará does not present specific guidance or criteria such as the CMA, Beef on Track, Cerrado Protocol and so on, it is an important tool that can support producers to comply with different standards. It also shows that the Pará state government is aware of the importance of providing systems that contribute to the verification of information, therefore supporting companies and buyers to handle sustainability requirements. Among other elements, Selo Verde Pará is aligned with the CMA specifications in terms of the need to conduct a monitoring and verification process to check that companies’ production and operations comply with their commitments, that the monitoring and verification method uses satellite imagery-based analysis, on supporting traceability to the farm level, and that the results are used to inform decision-making and continuous improvement.
Another document that was considered in this analysis is the EU proposal for a regulation on deforestation-free products. This legislative initiative is still at proposal stage and aims at minimizing the EU’s contribution to deforestation and forest degradation. This objective will be achieved by establishing a tiered mandatory due diligence system combined with a benchmarking system.

As much as possible, the EU proposal is based on existing relevant EU internal market and customs legislation. It also addresses specific issues that emerged as a result of the implementation of the Europe Timber Regulation (EUTR). This regulation sets out a cut-off date of 31st December 2020 which is later than the date in the Brazilian Forest Code and all the reference documents which include Brazil. But as the CMA specification does not provide guidance on specific cut-off dates, the EU proposal would be aligned with it.

The due diligence steps outlined in the EU proposal for a regulation on deforestation-free products are quite similar to the criteria included in the CMA specification; similar information and documentation are required to demonstrate progress. The due diligence procedure is divided into three stages:

1. **Information collection**: description of sourcing area, volumes purchased, origin with geographic coordinates, name of supplier and evidence of that the product is deforestation free and legal.

2. **Risk assessment**: should consider country, level of deforestation, reliability of information, complexity of supply chain, certification, and third-party scheme.

3. **Mitigation**: risk assessment and mitigation to include audits to test validity, must show no/negligible risk.

The EU proposal outlines due diligence obligations companies must comply with such as publicly reporting annually on the due diligence system used and steps taken; submitting due diligence statements at least 5 days before commodities are placed on the European market; and ensuring that statements are entered into an (anonymized) public register. Traders are required to keep records of purchases and sales, access information on producers and report any suspicions of deforestation.

The intensification of Brazilian cattle ranching systems has attracted both national and international attention due to the direct relation between cattle ranching and deforestation in the Amazon region. Climate Policy Initiative publications reveal important information about the intensification of livestock farming in Brazil. The publications show that the intensification of cattle ranching activities could enable cattle productivity to increase at least twofold, reducing the pressure on forests and greenhouse gas emissions while generating economic benefits and facilitating trade with China. It is critical to take into consideration other aspects, such as the socioeconomic and biodiversity benefits of sustainable livestock production, animal welfare and sustainable development as they are covered in the CMA document.

Finally, the CMA specification is very comprehensive; it has a broader scope than most of the documents analyzed in this comparative analysis. It provides more guidance than the other documents in terms of risk assessment and management, communication and contract, the development of an implementation plan, monitoring and verification, and managing review and claims.
B) ANALYSIS OF WHAT THE RESULTS OF THE TECHNIFICATION STUDY MEAN for the implementation of CMA specifications, and what the CMA specifications mean for Brazilian cattle producers in terms of measures and investment needed

CMA specifications would have relevant implications for Brazilian cattle producers in terms of improvements and investments. These may be classified into four main categories: conservation, restoration, increasing productivity through best practices for production, and improving traceability. Conservation of native vegetation will be integrated into sustainable livestock practices as long as standing forests and other ecosystems are equally profitable for ranchers, or as long as ranchers internalize the importance that native vegetation has for production, for people and for the planet. On the one hand, this implies the valuation of forest and biodiversity assets, which can be made feasible in the short term through access to national public policies or international funding sources that promote, for instance, payment schemes for environmental services, or benefits for mitigating emissions of greenhouse gases. On the other hand, this implies increasing people’s awareness, a long-term process that demands strong and lasting investments in education and culture.

In order to meet the CMA requirements, Brazilian ranchers also need to have their properties in legal compliance with Brazilian environmental laws. However, the environmental liabilities in Brazil are high and restoring degraded ecosystems requires a high level of investment, involving the purchase of inputs, fences, special tools and machinery. In addition, specialized technical assistance is also required to ensure that the restoration efforts and investments are successful.

Increasing productivity through best practices for production means increasing the economic income of cattle ranchers, while avoiding clearing new areas of native vegetation. Examples of best practices may include genetic improvements, nutritional management with supplementation, adoption of animal welfare practices, improving the condition and management of pastures, as well as specialized technical assistance, making it possible to produce a larger number of animals in a smaller area.

CONSERVATION OF NATIVE VEGETATION WILL BE INTEGRATED INTO SUSTAINABLE LIVESTOCK PRACTICES AS LONG AS STANDING FORESTS AND OTHER ECOSYSTEMS ARE EQUALLY PROFITABLE FOR RANCHERS

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In terms of financial investments needed, this depends on the type of action required for each property, the size of the property, the number of properties, and so on. It also depends on a collaborative effort from stakeholders and the political will to improve traceability in Brazil, as well as investments to establish reporting, monitoring, and verification processes. The technification study developed by Scot (2021) gathered information related to the number of hectares of degraded pastures that have been recovered in the scope of some initiatives such as the Low Carbon Agriculture Plan (ABC Plan), for instance, but does not provide information on the amount of money invested.

Finally, the criterion that requires traceability to the farm level implies improving traceability in Brazil. However, improving traceability requires the joint effort of stakeholders across the entire supply chain and the development of tools, as well as the political will to provide access to existing data (such as in the state of Pará with Selo Verde) and where necessary, to create and implement new laws. This theme will be better explored in the next section of this report.

Scot’s final report provides an overview of exports of beef from Brazil to China, projections for the demand for beef in China by 2030, the results of stakeholder consultations (such as considerations regarding trends for the Brazil-China trade relationship, and qualification process and challenges to slaughterhouses), information on production, herd, export and per capita consumption in the main exporting countries, as well as analysis of low carbon productive systems in Brazilian livestock (including their influence by the Chinese market and prospects for scalability), the requirements for the joint effort of stakeholders across the entire supply chain and the development of tools, as well as the political will to provide access to existing data.
of the main beef importing countries from Brazil, and considerations on the use of tools and data crossing for monitoring and controlling the origin of cattle in Brazil. All this information is useful to analyze part of the investments and impacts of the implementation of the CMA requirements in Brazil.

In terms of investments on beef production, the technification study estimates the total cost of high-tech renovation of degraded grazing areas (R$126.99 billion in Scenario 1; R$209.34 billion in Scenario 2; and R$245.81 billion in Scenario 3 – pg. 339). However, there is no information related to the total amount needed for conservation of native vegetation, restoration, environmental suitability of rural properties, and improving traceability, which are important aspects to enable the broad implementation of the CMA requirements in Brazil.

One important consideration that this study highlighted is that “The key players consulted believe that because Chinese demand for animal protein is high and likely to remain firm in the coming years, the trend is that environmental requirements will be required in about 5 to 10 years, depending on Chinese herd growth, domestic consumption, the consequent need for meat imports to supply domestic consumption, and political alignment between governments.”

In this context, the CMA specifications will certainly push the Chinese market towards a positive environmental agenda aiming to eliminate deforestation and conversion of native vegetation from the beef supply chain. On the other hand, this may lead to a reduction or suspension of Chinese purchases from Brazilian producers for environmental reasons, as some of the CMA specifications are stricter than Brazilian environmental legislation. So far, the main reasons that resulted in embargoes on Brazilian beef were
Some organizations in Brazil have been developing and implementing initiatives to incentivize agricultural producers and cattle ranchers to adopt actions to stop deforestation, reduce GHG emissions, improve productivity, comply with the Brazilian Forest Code, among other sustainability actions, mainly by providing finance and economic incentives.

These initiatives could potentially be used by demand and supply actors as a way to demonstrate at least partial alignment with the CMA’s Specification for Meat Industry Green Trade.

**C) MAIN INCENTIVES THAT COULD BE POTENTIALLY USED BY DEMAND/SUPPLY ACTORS**

THE OPPORTUNITIES FOR THE CMA:

- CMA: Engage with initiatives that provide incentives to demand and supply actors to align their overall sustainability framework with the CMA’s Specification for Meat Industry Green Trade.
- Demand side: Prioritize upstream suppliers that support farmers to access the incentives provided by the initiatives so that suppliers would be aligned with the CMA’s requirements.
- Supply side: Support farmers to participate in sustainability projects in order to receive economic and financial incentives and comply with sustainability requirements that are aligned with the CMA’s Specification for Meat Industry Green Trade.

**PRIORITIZE UPSTREAM SUPPLIERS THAT SUPPORT FARMERS TO ACCESS THE INCENTIVES**
AGRI3 FUND

The AGRI3 Fund was born out of a partnership between UN Environment and Rabobank, who came together in 2017 to announce an ambitious partnership with the aim to unlock at least USD 1 billion in finance towards deforestation-free, sustainable agriculture and land use.

The partnership has since expanded to include the Dutch development bank (FMO) and IDH: the Sustainable Trade Initiative.

INCENTIVES:

The AGRI3 Fund will provide guarantees to commercial banks and other financial institutions, and subordinated loans to customers of these institutions, which will become known as ‘partner-banks’, to mobilize financing by de-risking and catalyzing transactions that actively prevent deforestation; stimulate reforestation; contribute to efficient sustainable agricultural production; and improve rural livelihoods.

A Technical Assistance (TA) facility has also been established to accelerate the development of investable opportunities and maximize their impacts. The TA Facility is managed by the Sustainable Trade Initiative (IDH) and works closely with the Fund Manager and Investment Advisers.

POTENTIAL OPPORTUNITIES:

**CMA:** Engage with AGRI3 Fund and align the TA Facility approach with the CMA framework so that partner banks can provide loans to farmers who commit to comply with at least some of CMA’s requirements.

**Demand side:** Prioritize upstream suppliers that support farmers to access the funds and comply with sustainability requirements.

**Supply side:** Support farmers to access the funds, comply with sustainability requirements and be recognized and prioritized by downstream buyers.

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TROPICAL FOREST ALLIANCE

20 The initiatives were identified through a desk-based online survey. Their status as per March 2022 when it comes to providing incentives to the demand and supply actors were not checked.
BANCO DO BRASIL - MORE SUSTAINABILITY IN AGRIBUSINESS

Banco do Brasil supports rural producers in the continuous improvement of their activities, seeking to increase productivity reconciled to practices of conservation of natural resources.

This line of action contributes to the fulfillment of international commitments signed by the Brazilian Government to the United Nations regarding the climate issue and biodiversity.

INCENTIVES:
Banco do Brasil offers rural credit solutions that, directed according to financial, climatic and market risks, allow producers to improve business management, as well as the adoption of good socio-environmental practices, through resilient and viable production systems, contributing to stability in the field.

PRODUCTION SYSTEMS AND GOOD AGRICULTURAL PRACTICES:
» Crop-Livestock-Forest Integration
» Recovery of Legal Reserve and Permanent Preservation Areas
» Recovery of degraded pastures
» Biological nitrogen fixation

LOW CARBON AGRICULTURE (ABC):
The ABC allows rural producers to finance investment projects aimed at practices that contribute to the reduction of greenhouse gas emissions from agricultural activities.

With the adoption of more sustainable techniques and production systems, it is possible to increase productivity, reduce deforestation, reconcile soil and water conservation, adapt rural properties to environmental legislation, expand the area of cultivated forests and stimulate the recovery of degraded areas.

POTENTIAL OPPORTUNITIES:
CMA: Engage with Banco do Brasil and align the bank’s sustainability programmes with the CMA’s framework so that the bank can provide loans to farmers who commit to comply with at least some of the CMA’s requirements.
Demand side: Prioritize upstream suppliers that support farmers to access the funds provided by Banco do Brasil and comply with sustainability requirements.
Supply side: Support farmers to access the funds, comply with sustainability requirements and be recognized and prioritized by downstream buyers.
Since 2010, Santander provides credit followed by technical guidance to rural producers who want to invest in innovation and sustainability in rural areas.

The Responsible Agribusiness Program works on two fronts: incentives for low-carbon agriculture, with the adoption of crop and livestock farming systems that combine productivity, conservation of natural resources and lower environmental impacts, and promotion of the use of solar energy.

INCENTIVES:
Agronomists and agribusiness technicians trained in the Brazilian Forest Code and socio-environmental issues work in partnership with the bank’s commercial teams to identify opportunities for improvement in rural areas and to provide guidance to clients. In addition, Santander promotes events to engage its clients in good socio-environmental practices.

At the same time, Santander supports the viability of the changes through special lines of financing.

Santander works in partnership with agricultural cooperatives and other organizations to promote responsible agriculture in Brazil. In 2018, the bank launched, in partnership with Bunge and The Nature Conservancy, a financing mechanism to stimulate deforestation-free agricultural production in the Brazilian Cerrado. In the first phase, US$50 million was made available via the program.

POTENTIAL OPPORTUNITIES:
CMA: Engage with Santander and align the bank’s sustainability programmes with the CMA framework so that the bank can provide loans to farmers who commit to comply with at least some of the CMA’s requirements.
Demand side: Prioritize upstream suppliers that support farmers to access the funds provided by Santander and comply with sustainability requirements.
Supply side: Support farmers to access the funds, comply with sustainability requirements and be recognized and prioritized by downstream buyers.
B3 CORPORATE SUSTAINABILITY INDEX (ISE B3)
The ISE B3 is an economic index that measures the average stock performance of companies recognized for their commitment to corporate sustainability.

INCENTIVES:
The ISE B3 is designed to measure average stock performance tracking changes in the prices of stocks of companies recognized for their commitment to corporate sustainability. This induces listed companies to adopt best ESG practices and support investors in their decision-making process based on these aspects.

The following companies that are listed on the ISE B3 2022 portfolio can play a role in promoting incentives for sustainable cattle ranching (including financial institutions):

BRFS3 - BRF SA: BRF Brasil Foods is a Brazilian food manufacturer with products including poultry, specialty meats, frozen food, and condiments. It is one of the largest producers of animal feed in the world.

ITSA4 - ITAU UNIBANCO: Itaú Unibanco is the largest private bank in Brazil, the largest financial institution in Latin America and one of the largest in the world. For the 16th consecutive year, Itaú was considered the most valuable brand in Brazil, according to the Interbrand Ranking, among other important forms of market recognition.

BEEF3 - MINERVA: Minerva Foods are one of the leaders in the production and sale of fresh beef and its byproducts, live cattle exports and beef processing in South America.

PCAR3 - P.ACUCAR-CBD: GPA is a Casino Group company present all over Brazil, as well as in Colombia, Uruguay and Argentina through Grupo Éxito, with more than 800 brick and mortar stores and as leaders in food e-commerce in Brazil.

POTENTIAL OPPORTUNITIES:
CMA: Engage with ISE B3 to benchmark and align the index’s criteria with the CMA framework and requirements.
Demand side: Prioritize upstream suppliers and potential clients that are listed in the ISE B3 portfolio and recognize them as aligned with the overall CMA framework.
Supply side: Be recognized as aligned with the CMA’s overall requirements by joining the ISE B3 portfolio and potentially receive economic and financial benefits from downstream buyers and financial institutions.
PCI – PROTECT, CONSERVE, INCLUDE
The PCI Institute, through its Investment Committee, aims to facilitate attracting funds to leverage its strategic goals in the state of Mato Grosso. Estimates made by partners in mid-2016 indicate a need for resources totalling between 30 to 50 billion reais including operational costs, investments and technical assistance for the full implementation of the PCI strategy by 2030. Since the PCI strategy was created, the state of Mato Grosso has managed to establish a series of partnerships and projects that support it. PCI itself has developed a series of actions aimed at connecting investors, buyers, companies and partners to the territory. The PCI Institute was also conceived as a managerial and financial instrument capable of raising funds for programs and projects to support the PCI strategy and will further leverage Mato Grosso’s capacity to attract investments aimed at the sustainable use of land. The PCI integrates existing policies and builds upon previous efforts to reduce deforestation, expand compliance with the Brazilian National Forest Code, fulfil sustainability commitments in supply chains, create opportunities around REDD+ and promote economic development and social inclusion for smallholders, indigenous and traditional farmers and communities.

PCI’s goals directly contribute to the Brazilian NDC (nationally determined contribution) under the Paris Agreement and to the United Nations Sustainable Development Goals (SDGs).

INCENTIVES:
» Attracting funds through partnerships and international cooperation to foster actions related to the strategy
» Connecting public and private initiatives to meet the objectives proposed by the strategy for efficient land use
» Helping ensure a low-risk environment for the private supply and investment sectors, contributing to leverage new businesses in the jurisdiction, expand markets and improve the image, thus projecting the state onto the international scene
» Testing new economic incentives and financial mechanisms, such as specific credit lines, risk reduction mechanisms for investors, compensation mechanisms, green bonds and others
» Testing in the field and sharing knowledge on intensification solutions, good practices and restoration
» Operating as a driver for the implementation and monitoring of public policies
» Generating intelligence and collective knowledge for public and private actions

POTENTIAL OPPORTUNITIES:
CMA: To engage with PCI and support the implementation of projects aligned with the CMA framework that can benefit from economic incentives and financial mechanisms.
Demand side: To prioritize upstream suppliers that support farmers to participate in projects supported by CMA.
Supply side: To support farmers to participate in projects supported by CMA.
PROAPE – SUSTAINABLE AND ORGANIC BEEF FROM THE PANTANAL

This is a new program for sustainable and organic beef production in Mato Grosso do Sul State, aiming to reduce the environmental impact of beef production on the Pantanal biome. It is accredited by INMETRO, Brazil’s standards body.

The production system seeks to value traditional production processes in the Pantanal biome. This type of production aims to achieve an end product obtained in a socially and environmentally responsible way: conserving local biodiversity and preserving ecosystems in the process.

INCENTIVES:
Financial incentives will be granted to animal suppliers and certified by independent companies, authorized by Semagro (the Secretariat of State for Environment, Economic Development, Production and Family Agriculture), in compliance with the protocol described for the production systems of the modalities (Organic Pantanal and Sustainable Pantanal).

INCENTIVE CATEGORIES:

» Organic Pantanal: Certified animals whose identifications, by SISBOV numbering earrings, result in an incentive to be paid to the producer, equivalent to 67% of the tax due in relation to the respective operation.

» Sustainable Pantanal: Certified animals whose identifications, by SISBOV numbering earrings, result in an incentive to be paid to the producer, equivalent to 50% of the tax due in relation to the respective operation.

POTENTIAL OPPORTUNITIES:

CMA: To engage with the programme and align its protocol and certification scheme with the CMA framework so that the programme can provide incentives to farmers who commit to comply with at least some of the CMA’s requirements.

Demand side: To prioritize upstream suppliers that support farmers to get certified and comply with sustainability requirements.

Supply side: To support farmers to get certified, comply with sustainability requirements and be recognized and prioritized by downstream buyers.
2 1  If the property is in Legal Amazon region, the Legal Reserve should be: 80% if the property is located in a forested area; 35% if the property is located in the Cerrado area; 20% if the property is located in an area of general fields. If the property is in the other regions of the country, the Legal Reserve should be 20% of its area.

D) COMMON ELEMENTS AND DIFFERENCES BETWEEN THE

CMA STANDARDS AND JURISDICTIONAL NORMS AND REGULATIONS

In this section we analyze the differences and common elements between the CMA specifications and relevant Brazilian jurisdictional norms and regulations such as the Brazilian Forest Code, Normative Instructions passed by the Brazilian government on Brazilian traceability tools, state-level licensing for cattle activities, and two additional initiatives which are relevant from a jurisdictional point of view: IMAC and Acripará.

CMA SPECIFICATIONS VS THE BRAZILIAN FOREST CODE

The Brazilian Forest Code (Law 12,651/2012) is the national law related to the protection of native vegetation in Brazil, establishing general rules on the protection of vegetation, Permanent Preservation Areas, Legal Reserve Areas, forest exploitation, the supply of forest raw material, the control of the origin of forest products and prevention of forest fires, providing economic and financial instruments to achieve its objectives. The Forest Code legislation defines high conservation areas and values that must be considered as Permanent Preservation Areas, defines the percentage of the rural property that must be preserved as legal reserve depending on its location, and determines that the Legal Reserve Area must be registered with the competent environmental agency through registration via the Rural Environment Registry (CAR, acronym in Portuguese).

Article 29 of the Forest Code introduces the CAR within the scope of the National Environmental Information System (SINIMA): a national electronic public registry, mandatory for all rural properties, with the purpose of integrating the environmental information of rural properties and possessions, with a database for monitoring, environmental and economic planning, and combating deforestation. The registration of rural properties in the CAR must be done at the municipal or state environmental agency. The information required is as follows: owner’s ID; proof of property ownership/possession; property ID using geographical coordinates; the location of the consolidated areas, native vegetation, Permanent Protection Areas and Legal Reserve Areas.

The CMA specifications and the Brazilian Forest Code are aligned in terms of their references to nature conservation and avoidance of land degradation, deforestation, and conversion of native vegetation.

The Rural Environmental Registry (CAR) included in the Forest Code is aligned with the CMA specifications, since it is a tool that supports monitoring and verification of environmental compliance of suppliers. However, it is important to highlight that the CAR is a self-declaration made by the

21 If the property is in Legal Amazon region, the Legal Reserve should be: 80% if the property is located in a forested area; 35% if the property is located in the Cerrado area; 20% if the property is located in an area of general fields. If the property is in the other regions of the country, the Legal Reserve should be 20% of its area.
property owner that requires further validation by local environmental agencies.

The environmental compliance process for properties is composed of several stages and requires action by different stakeholders. The first steps involve the registration, analysis, and validation of the CAR, and states also need to regulate and implement the Environmental Regularization Program (Programa de Regularização Ambiental – PRA)\(^2\).

While the analysis and validation stage of the registration process has begun in most states, it remains the main bottleneck to Forest Code implementation. Challenges found at this phase include: the high number and low quality of registrations, the lack of cartography data and the lack of technical and human resources to carry out the validation\(^3\).

The CMA specifications require that suppliers have zero deforestation and zero conversion cut-off dates, but do not specify or guide companies on acceptable cut-off dates. On the other hand, the Brazilian Forest Code defines that any clearance for production on Permanent Preservation Areas, Restricted Use Areas, or Legal Reserves after July 22nd, 2008, is illegal.

The Forest Code also includes transitional rules for landholdings that do not comply with the Permanent Preservation Areas, Restricted Use Areas, or Legal Reserves, allowing rural properties to start a process of compliance by implementing an Environmental Regularization Program\(^4\). This is somewhat similar to a suspend and engage approach when non-compliance is identified, giving rural landholdings an opportunity to become compliant. Nonetheless as previously mentioned, the CMA specifications only include suspension mechanisms and do not mention an engagement approach with re-entry criteria.

Finally, the CMA specifications has a criterion which states that companies should avoid and eliminate raw material in the meat trade and, subsequently, Chinese companies should be aware of the Brazilian legislation and ascertain that their suppliers are in accordance with the Brazilian Forest Code. A practical guide on how to assess compliance with the Forest Code has been published by Proforest in partnership with Forest Code Observatory, IPAM, and BVRio.

**CMA SPECIFICATIONS VS NORMATIVE INSTRUCTIONS**

Normative Instruction 1/2002, published by the Brazilian Ministry of Agriculture, Livestock and Food Supply created the Brazilian Bovine and Bubaline Identification and Certification System (SISBOV) and defined its scope. The objective of SISBOV is to identify, record and monitor all cattle and buffalo born in Brazil or imported since the publication of the Normative Instruction. A Regulatory Instruction was published in 2005, stating that only exporting producers are obliged to join SISBOV.

The Normative Instruction 17/2006 established
that SISBOV would be a voluntary system and that the identification of animals would be unique throughout the country. Codes of up to 15 numeric digits would be issued for each animal, controlled by the Secretariat for Agricultural Development and Cooperatives in a national database (BND), in accordance with the standards of the International Committee for Animal Recording (ICAR). Rural establishments approved by SISBOV may only keep animals that are in the national database: all animals born on the property must be identified and included in the national database. Every animal without an electronic tagging device will be issued an Animal Identification Document (DIA) from the time it is registered in the national database until it is discharged from the system, be it natural death, slaughter, or sacrifice. The DIA will accompany the cattle or buffalo during transit for any purpose, attached to the Animal Transit Guide (GTA).

The GTA is a mandatory official Brazilian document issued by state animal health control agencies that must accompany cattle transit, providing information on its origin, destination, purpose of the transport, and owner data, supporting traceability and disease control. The GTA is required by slaughterhouses for all cattle movements, regardless of the final destination of the meat, for the domestic and export markets. However, GTA identifies just the last property that the animals have gone through, so it does not provide full traceability to indirect suppliers.

The identification by batches through GTAs is the main traceability tool adopted in Brazil, but the aim of this process is sanitary control, and it only identifies direct cattle suppliers. Individual identification traceability tools allow traceability to indirect suppliers (intermediate origins and initial origins), but these represent a small portion of the monitoring carried out in Brazil and the use of such tools is not mandatory for the internal market, which represents approximately 80% of total production. Besides the use of GTAs there are no other legal traceability obligations.

The CMA specifications require suppliers to know the origin of raw materials to the farm level or place of production (criterion 5.1.5.2) and present a few methods to be used to achieve such traceability (criterion 5.1.5.3): a) tracing material to producing units of origin; b) tracing to intermediate suppliers with effective control systems in place; c) utilizing credible assurance systems; d) tracing to jurisdictions or landscapes where performance fulfill the companies’ commitments.

The Normative Instructions analyzed in this report align with the CMA criteria on the aim to support traceability within supply chains. However, the GTA, which is the only legal obligation for supply chain actors only provides information on direct suppliers, which is not enough to meet the CMA specifications, unless the identified suppliers have effective control systems in place. On the other hand, SISBOV is a tool that can promote traceability to indirect cattle suppliers up to origin,
but it is only mandatory for exporting producers. Therefore, Chinese companies can use SISBOV to guarantee traceability to farms of birth.

**CMA SPECIFICATIONS VS STATE-LEVEL LICENSING**

It is also relevant to mention existing state-level regulations relating to cattle activities, such as the Licença Ambiental Única (LAU) and Licença Ambiental Rural (LAR) licenses.

The state of Mato Grosso comprises parts of the Amazon, Cerrado and Pantanal biomes and requires that all cattle activities have a LAU license to operate. This license is emitted by the competent organization (SEMA/MT) and lasts for 6 years. Suppliers are required to register livestock activity in an official registration mechanism called Cadastro Técnico Federal (CTF) on the IBAMA website, otherwise the property can be fined. Likewise, the Pará state, which is mostly covered by the Amazon, also requires a similar license: the LAR license. The LAR license is required for livestock activities to legally operate.

Both licenses aim to guarantee compliance with Brazilian law and are to be followed by any company. It is important that Chinese companies are aware of the state-level requirements before cattle activities can legally operate since the CMA specifications include a basic requirement that companies should eliminate and avoid illegal raw material in the meat trade (criterion 4.2).

**CMA SPECIFICATIONS VS IMAC AND ACRIPARÁ**

The Instituto Mato-Grossense da Carne (IMAC) is an autonomous agency which aims to promote beef from Mato Grosso state and has a reintegration program for embargoed cattle suppliers. Likewise, Acripará, a non-profit organization which operates in Pará state, also aims to promote legislation compliance in the beef sector and support the reintegration of embargoed suppliers.

Both IMAC and Acripará support beef traceability, compliance with environmental and social legislation, and reintegration of embargoed suppliers in supply bases in Mato Grosso and Pará states, respectively. IMAC has an initiative called the “Reinsertion and Monitoring Program” which supports areas that were illegally defor-
Rancher participation in the program is voluntary and consists in identifying environmental damage and monitoring regeneration on the properties. Acripará has an initiative called SIRFLOR, which was created in order to offer rural producers a simplified administrative procedure to rehabilitate properties that do not meet the criteria of the Terms of Adjustment of Conduct (TACs) due to illegal deforestation. This procedure allows suppliers to return to the formal and legal market.26

SIRFLOR is available on an online platform; is accompanied by technical analysts; is 100% auditable in all its stages; and the documentation required in its protocol ensures compliance with the guidelines and obligations established by national and international environmental legislation, as well as the criteria determined since 2009 in the TACs.

In summary, both IMAC and Acripará align with the CMA specifications on support for beef traceability and legislation compliance. However, in terms of how to deal with non-compliance, the CMA specification only includes suspension and elimination mechanisms while both IMAC and Acripará are very supportive of engaging suppliers and promote supplier reintegration in supply bases.

Moreover, as both these initiatives are in biomes considered to be at high risk of deforestation according to the CMA specification 4.9, these initiatives also diverge from the CMA standard
TO DETERMINE GAPS AND IMPLEMENTATION COSTS

The actual costs of addressing and implementing the CMA’s sustainability standards depend on an assessment of the current endeavors by Brazilian meatpackers to tackle their own goals through commitments they have disclosed in recent years. For instance, Marfrig has launched its Programa Marfrig Verde+ (Green+ Program)\textsuperscript{27}, which aims to ensure that 100% of the company’s production chain will be sustainable and deforestation-free over the next ten years. Marfrig has signed a US$30 million, 10-year, sustainability-linked financing agreement with Stichting &Green Fund to invest in a deforestation-free cattle supply chain in the Amazon and Cerrado biomes.

JBS has commitments to achieve net zero greenhouse gas emissions by 2040, as well as to eliminate the procurement of cattle from indirect suppliers engaging in illegal deforestation in the Amazon biome by 2025. The company also signed a partnership with the health and nutrition company Dutch Royal DSM to use a food supplement that reduces the methane emitted by cattle in its supply chain\textsuperscript{28}.

As demonstrated in the first section of this report, the CMA’s criteria vis-à-vis the GIPS, CGF FPC Beef WG and other benchmarked systems give particular emphasis to multi-stakeholder alignment, including in the conceptual and scope dimensions of sustainability and the commitment with the global environmental agenda (for example, criteria 4.7 and 4.9 of the CMA specification). Minerva Fine Foods has also set up commitments to reduce scope 1 and 2 GHG emission intensity by 30% by 2030, including specific provisions regarding its operations in South America, where it is the leading exporter of in natura beef. Minerva aims to achieve zero illegal deforestation throughout its supply chain by 2030.\textsuperscript{29,30}

Minerva is the only meatpacker out of the three which is part of the 2021/2022 portfolio of the B3 Corporate Sustainability Index (ISE), in effect between January 3 and December 30, 2022, which includes 46 companies from 27 different sectors.\textsuperscript{31} It is also crucial to state that implementation costs related to compliance with the CMA specification must be considered from the perspective of the timeframe and strategy for company action plans. For instance, Marfrig Verde+ has set up a short-term range of actions\textsuperscript{32} to be undertaken by 2025, based on compliance with the UN Sustainable Development Goals.

in that sense, since the CMA recommends that companies avoid purchasing from areas with a high risk of deforestation.

E) COMPARISON BETWEEN THE CMA STANDARDS AND SLAUGHTERHOUSE PRACTICES (MINERVA, MARFRIG AND JBS)
On the one hand, the advances of the companies show potential for reducing additional costs to comply with the specific criteria of the CMA. On the other hand, the lack of clarity on the timeframe to fully implement their systems, and the differences between the meatpackers’ KPIs and commitments are limiting conditions to set up a clear assessment of investments and organizational shifts that are actually required.

To illustrate the aspects above, we benchmarked Marfrig, Minerva and JBS’ sustainability commitments and other publicly disclosed documents and institutional media resources related to their KPIs and action plans. The analysis reveals that, despite the companies having different timelines for their goals and different implementation strategies and partners, the scope of their commitments and plans are very similar. For instance, geospatial tools are referred to by the three meatpackers as a reference to improve traceability standards and achieve transparency targets.

On the other hand, although covering deforestation KPIs, they are essentially limited to high-risk areas and do not cover zero conversion commitments.

The same conclusion can be made when it comes to the companies’ human rights provisions.

The level of coverage of such aspects may have impacts in the way the programs can be pursued by external stakeholders or obtain resources. A recent example is the U$S 43 million loan for which Marfrig has applied to the Interamerican Development Bank in order to implement its Marfrig Verde+ program. In the last quarter of 2021, 200 civil society organizations wrote and shared a public petition against the program, citing environmental and human rights violations.

In 2021, the Norwegian Norges Bank executive board also decided to put Marfrig Global Foods SA under observation regarding its Pension Fund Global; “due to risk that the company contributes to serious environmental damage.”


TROPICAL FOREST ALLIANCE 41
### 5. ANNEX I

<table>
<thead>
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<td>4.5 Company shall continuously improve animal welfare throughout livestock production, transportation and slaughtering in the meat trade.</td>
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<td>4.9 Company shall avoid supplying/purchasing products from areas with high risk of deforestation, such as the Amazon rainforest and the Cerrado savanna, the Congo Basin in Africa, and the Great Barrier Reef in Australia. For areas with high risk of deforestation, please refer to &quot;DEFORESTATION FRONTS: DRIVERS AND RESPONSES IN A CHANGING WORLD&quot;.</td>
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<td>4.10 Company shall confirm the effectiveness of each link through the target assessment tools, establish the regular reporting, overall assessment and continuous improvement mechanism to improve the technical level of the implementation of this specification. For Assessment tools, please refer to &quot;Target Assessment Tools for Company Goals&quot;.</td>
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## 5.1 Supplier Responsibility

### 5.1.1 Zero Deforestation Commitments in the Process of Production and Operation

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5.1.1.1 Suppliers shall commit not to convert natural forests into agricultural land, plantation land, land for animal husbandry production or other land uses in the process of production and management, and to avoid activities that may cause serious or sustained degradation of such natural forests.

5.1.1.2 Suppliers shall commit to take appropriate measures to support the long-term protection of the natural forests associated with companies' production and operation and their ecological values, and provide restoration and/or remedy measures when companies violate their commitments and cause or lead to deforestation.

5.1.1.3 Suppliers shall set a cutoff date for each commitment. After this date, land units associated with deforestation will be considered as non-compliant units. The cutoff date for deforestation should be no later than the date of the commitment.

5.1.1.4 Suppliers shall commit to set a target date for zero deforestation. Before this date, suppliers should fully fulfill their responsibility for zero deforestation and achieve the goal of zero deforestation.

### 5.1.2 Zero Conversion Commitments in the Process of Production and Operation

5.1.2.1 Suppliers shall commit not to convert the natural ecosystem into agricultural land, plantation land, land for animal husbandry production or other land uses in the process of production and operation and to avoid activities that may cause serious or sustained degradation of such natural ecosystem.

5.1.2.2 Suppliers shall commit to take appropriate measures to support the long-term protection of natural forests and their ecological values within the scope of companies' production and operation, and providing restoration and/or remedy measures when companies violate their commitments and cause or lead to natural ecosystem conversion.

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### 5.1.3 Commitments to Respecting Human Rights to Subsistence and Development

5.1.3.1 Suppliers shall respect the rights and interests of indigenous people in the area where the companies operate and make production, and ensure that the local community people, industrial workers and related groups will immune from being affected by the economic activities of companies.

5.1.3.2 Suppliers shall establish complete ethical norms, perform social responsibilities, refuse to employ child labor, and eliminate racial discrimination. The employees shall enjoy the labor benefits and legal leave as set out in the laws and regulations of the country where it locates. There shall be no bribery among the company personnel.
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Selo Verde AFI

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### 5.1.4 Free, Prior, and Informed Consent

**5.1.4.1** Prior to any activity that may affect indigenous peoples' and local communities' rights, land, resources, livelihoods, and food security, Free, Prior and Informed Consent (FPIC) must be secured.

### 5.1.5 Product Traceability

**5.1.5.1** The source information of various raw and auxiliary materials and products in the supply chain shall be clear and unambiguous, based on which it shall be able to determine that the manufacturers and processors of origin comply with the commitments.

**5.1.5.2** Suppliers shall know the origin of raw and auxiliary materials to the level of farm, plantation, ranch, place of production or forest management unit.

**5.1.5.3** To meet the above-stated requirement that origins of materials in supply chains are precisely traced, buyers at any stage of the supply chain must institute adequate traceability conditions through one or more of the following methods:

a. tracing raw and auxiliary materials back to the production or processing units of origin (Certificate of Origin);

b. tracing raw and auxiliary materials back to an intermediate supplier that itself has effective control mechanisms in place to ensure that its supplies are traced to the production or processing units of origin, and can provide sufficient evidence of this to the buyer;

c. utilising credible assurance systems (e.g., credible certification systems) capable of linking raw and auxiliary material supplies with production units having specific compliance or performance attributes;

d. tracing raw and auxiliary materials to administrative jurisdictions or landscapes where it has been demonstrated that performance with regard to specific social or environmental issue(s) is adequate to fulfil the buyer’s commitments on the corresponding issue(s).

**5.1.5.4** Suppliers shall provide documentary evidence of zero deforestation/zero conversion.

### 5.2 Buyer responsibility

**5.2.1** Buyers shall refuse to purchase products with deforestation impact and conversion factors and non-conforming deforestation-related products listed in this Specification.

**5.2.2** Buyers shall strictly abide by the principle of respecting human rights to subsistence and development and refuse to accept products produced and provided without respect for human rights.

**5.2.3** Buyers shall set a clear cutoff date for deforestation and a target date for zero deforestation.

**5.2.4** To ensure that the goods are sourced from non-deforested areas and free from conversion circumstances, buyers have the responsibility and right to trace and monitor the purchased goods according to the committed cutoff date for deforestation.

**5.2.5** Before purchase, buyers shall assess suppliers effectively; after purchase, buyers shall evaluate each link of the purchase and make an effective evaluation. (For the evaluation method, please refer to “Target Assessment Tools”)

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**5. Planning**

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### 6.1 Risk Assessment and Management

6.1.1 Risk assessment and management should generally be conducted across a company’s entire supply-base and be integrated with the management systems related to company commitments.

6.1.2 Risk assessment and management should also be conducted when new operations are being established or new sourcing origins or suppliers are being considered.

6.1.3 The results of risk assessments should be updated periodically to ensure that risk management approaches are kept up-to-date.

6.1.4 The scope of risk assessment should consider all relevant risk attributes related to the commodity/ies, location(s) of production and processing, and supplier(s) being assessed.

6.1.5 The disaggregation of risk assessment must be specific to each commitment (i.e., social or environmental risk area), each commodity, and each geography.

6.1.6 The level of risk shall be classified with the adoption of the risk assessment method and according to the metrics and occurrence probability. (For the risk evaluation method, please refer to “Target AssessmentTools”)

### 6.2 Operational Control

#### 6.2.1 Procurement Planning

6.2.1.1 To avoid natural risks, regulatory and legal risks, market risks, reputation risks and financial risks, and reduce the negative impact of enterprise production and operation activities on natural resources or ecosystems, enterprises should formulate a green procurement plan before purchase.

6.2.1.2 The senior management of companies should take the lead in formulating green procurement plans and set up a specialized decision-maker panel to ensure the smooth implementation of such plans.

6.2.1.3 The implementation of procurement plans should be secured by the coordination between internal and external stakeholders. Commitments shall be incorporated into the decision-making process, systems and performance metrics of all applicable core business units (e.g., procurement), agents, subsidiaries and subsidiaries of the enterprise, including the dedication of relevant personnel to the enterprise, as well as the efforts to enhance awareness and capacity through corporate policies, incentives, manuals and training programs.

#### 6.2.2 Suppliers Management System Establishment

6.2.2.1 All buyers should establish a supplier management system in the supply chain. Supplier management includes all buyers in the supply chain, including processors and traders who purchase directly from producers, traders and downstream companies who purchase raw materials, processed products or finished products at different stages.

6.2.2.2 In order to implement the procurement plan stipulated by the company’s supply chain commitments, the buyers should formulate supplier requirements, including when the company can or must add, suspend, exclude or adjust the purchase terms with the suppliers.
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6.2.2 Suppliers Management System Establishment

6.2.2.1 All buyers should establish a supplier management system in the supply chain. Supplier management includes all buyers in the supply chain, including processors and traders who purchase directly from producers, traders and downstream companies who purchase raw materials, processed products or finished products at different stages.

6.2.2.2 In order to implement the procurement plan stipulated by the company’s supply chain commitments, the buyers should formulate supplier requirements, including when the company can or must add, suspend, exclude or adjust the purchase terms with the suppliers.
### 6.2.2 Suppliers Management System Establishment

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#### 6.2.2.3 According to the tracing results, the raw materials provided by the supplier can be certified for compliance:

a. tracing materials back to the production or processing units of origin; The production and processing unit in the place of origin certifies that the meat raw materials come from low-risk areas of deforestation and conversion;

b. tracing materials back to an intermediate supplier that itself has effective control mechanisms in place to ensure that its supplies are traced to the production or processing units of origin, and can provide sufficient evidence of this to the buyer;

c. utilising credible assurance systems (e.g., credible certification systems) capable of linking raw and material supplies with production units having specific compliance or performance attributes; or tracing raw and auxiliary materials to jurisdictions or landscapes where it has been demonstrated that performance with regard to specific social or environmental issue(s) is adequate to fulfill the buyer’s commitments on the corresponding issue(s).

### 6.2.3 Requirements for the organization, management, supervision and evaluation

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#### 6.2.3.1 The buyer shall evaluate the supplier’s progress and degree of compliance by regular information collection or review.

#### 6.2.3.2 Measures shall be taken to operate supplier management systems that define policies, procedures, supplier expectations, and supplier engagement strategies at the level of the commodity-buying company or its supply chains.

#### 6.2.3.3 Measures shall be adopted to regularly evaluate the satisfaction and pass rate of the supplier’s products.

#### 6.2.3.4 Measures shall be taken to ensure the engagement of non-compliant suppliers when environmental and social risks, negative impacts and/or non-compliance with company commitments are detected; this includes the development of supplier implementation plans to address these issues.

#### 6.2.3.5 Establishing a supplier elimination mechanism. The suppliers who are evaluated as unqualified or rank at the bottom shall be eliminated.

### 6.2.4 Communication and Contract

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#### 6.2.4.1 Supplier and buyer shall establish an effective communication mechanism through the issuance of manuals, guides, training, and seminars.

#### 6.2.4.2 Buyer shall clearly state the purchase requirements of zero deforestation and zero conversion in the purchase contract.

### 6.2.5 Developing an Implementation Plan

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#### 6.2.5.1 Buyers and suppliers shall have active communications on the formulation of an implementation plan.

#### 6.2.5.2 Buyers shall consult the industry about the regulations and policies of the area of source, keep abreast of the changes in the ecological environments of the forest lands and other sources of supplies, quantify procurement indicators and procurement progress, follow up the procurement results at each stage, and make regular summary and review by stages, thus to further formulate the objectives of the next stage.

#### 6.2.5.3 The implementation plan shall be aligned with the internal organizational structure of the supplier to ensure that the responsibility of each activity is assigned to each person.
6.2.2 Suppliers Management System Establishment

Selo Verde AFI GTPS Beef on Track Cerrado Protocol CGF FPC Beef WG Marfrig JBS Minerva Foods

6.2.2.3 According to the tracing results, the raw materials provided by the supplier can be certified for compliance:

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### 7.1 Monitoring and Verification

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7.1.1 The monitoring and verification process is conducted to check the compliance of a company’s production and operation activities with its commitments and obligations. When full compliance is not achieved, compliance should be assessed, for example, by quantifying the level of performance and/or the implementation of improvement plans.

7.1.2 Product purchasers shall assess the performance of the buyer’s supplier portfolio, as well as the effectiveness of the buyer’s supplier management system and other mechanisms to identify and address non-compliance or adverse effects.

7.1.3 The monitoring and verification method shall adopt recognized and technically sound methods (e.g. satellite imagery-based analysis of the changes in and cover, field observation, document review, stakeholder participation, interviews with affected persons or groups, community-based monitoring and other effective technologies) to ensure the credibility and comparability of observations and research results under different contexts.

7.1.4 The monitoring and verification process includes the assessment of risk and performance levels with the relevant information and views from local stakeholders. Effective mechanisms have been established to protect the confidentiality and security of information providers to facilitate the sharing of such information.

7.1.5 Verification should follow the good practices for sampling and auditing; methods for detecting risks, hazards and non-compliance with commitments; capability and independence of the assessment team; participation of stakeholders; and transparency of verification scope, metrics, process and results.

7.1.6 An independent third-party verification shall be conducted as necessary to verify compliance and performance levels and provide the necessary level of independent assurance to confirm communication and claims.

7.1.7 Third-party certification reports (or its summaries) should be publicly disclosed.

7.1.8 Companies shall use the monitoring and verification results to promote learning, decision-making and continuous improvement.

### 7.2 Evaluation and Improvement

#### 7.2.1 Establishing a Process Evaluation System

7.2.1.1 To achieve the desired objectives, the purchasing organization should formulate a series of progressive plans to determine the objectives to be achieved each year. This will be helpful to define the steps of activities, measure the work progress according to the evaluation system table and make reports as required.

#### 7.2.2 Establishing a Traceability System

7.2.2.1 Companies should establish a traceability system to secure the accurate traceability of raw and auxiliary materials and products.

7.2.2.2 When necessary, the accuracy of the collected and controlled traceability data can be verified through third-party verification.

7.2.2.3 Data analysis can be adopted to determine the traceability ratio, gradually improve the effective traceability range, and finally achieve the full traceability of purchased products, and thus to achieve the overall goal of zero deforestation.
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Selo Verde

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### 8.1 Report

8.1.1 Companies should regularly public the progress and results of zero deforestation/zero conversion between the trading parties in the production and operation process.

### 8.2 Disclosure

8.2.1 In addition to regularly reporting the progress of commitment fulfillment, companies are encouraged to disclose information relative to the participation in the green procurement plan, and actively respond to inquiries from external parties on information and events.

8.2.2 Companies should follow good and standard practices in data management, data formats, accessibility, and presentation to disclose their information. Information should be made available online in a manner that allows interested stakeholders to easily access, search, aggregate, and download information.

### 9. Supplier Violation Management

9.1 Companies are expected to have clear policies and procedures for how supplier non-compliance is addressed, including criteria and thresholds for making determinations about the severity of non-compliances and the corresponding course of action. This information should be documented in companies’ supplier management system and made known to all suppliers. (Appropriate action plans to assess the severity of non-compliance).

9.2 If a buyer identifies non-compliance(s) associated with a given business unit of a processor, trader, or multi-national supplier and determines that the situation warrants suspension or exclusion, the buyer must determine whether this suspension or exclusion extends to all or only a subset of the entities and operations associated with that supplier.

### 10. Managing Review and Claims

10.1 The statement should follow the principles of clarity, truth, evidence-based, verifiable, and not misleading or omissions.

10.2 The statement should include sufficient information to enable stakeholders to understand the content of the statement, and to prove the source and attributes of reasonable evidence for the statement.

### 11. Management System and Personnel

11.1 The decision makers of suppliers and buyers incorporate green procurement into the company’s environmental, social, governance (ESG) or sustainable development strategy, and specify corresponding departments and personnel responsible for promoting and implementing related plans and management systems. Green procurement should be incorporated into the decision-making process, system, and performance metrics of all applicable levels of the company’s core business units (such as procurement), agencies, affiliates, and subsidiaries.
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## 6. ANNEX II

### 6.1 Risk Assessment and Management
- 6.1.1 Procurement Planning
- 6.1.2 Suppliers Management System Establishment
- 6.1.3 Requirements for the organization, management, supervision, and evaluation
- 6.1.4 Communication and Contract
- 6.1.5 Developing an Implementation Plan

### 6.2 Operations

#### 6.2.1 Establishing a Process Evaluation System
- Selo Verde: 41%
- AFI: 23%
- GTPS: 36%
- Beef On Track: 14%
- Cerrado Protocol: 9%
- CGF FPC Beef WG: 5%

#### 6.2.2 Establishing a Traceability System
- Selo Verde: 45%
- AFI: 27%
- GTPS: 45%
- Beef On Track: 9%
- Cerrado Protocol: 9%
- CGF FPC Beef WG: 41%

### 5. Planning

#### 5.1 Zero Deforestation Commitments in the Process of Production and Operation
- Selo Verde: 33%
- AFI: 20%
- GTPS: 10%
- Beef On Track: 30%
- Cerrado Protocol: 30%
- CGF FPC Beef WG: 33%

#### 5.2 Zero Conversion Commitments in the Process of Production and Operation
- Selo Verde: 67%
- AFI: 50%
- GTPS: 70%
- Beef On Track: 30%
- Cerrado Protocol: 20%
- CGF FPC Beef WG: 67%

#### 5.3 Commitments to Respecting Human Rights to Subsistence and Development
- Selo Verde: 30%
- AFI: 20%
- GTPS: 30%
- Beef On Track: 20%
- Cerrado Protocol: 9%
- CGF FPC Beef WG: 30%

#### 5.4 Free, Prior, and Informed Consent
- Selo Verde: 20%
- AFI: 10%
- GTPS: 5%
- Beef On Track: 17%
- Cerrado Protocol: 17%
- CGF FPC Beef WG: 23%

#### 5.5 Product Traceability
- Selo Verde: 70%
- AFI: 67%
- GTPS: 40%
- Beef On Track: 50%
- Cerrado Protocol: 50%
- CGF FPC Beef WG: 70%

### 7. Inspection and Improvement

#### 7.1 Monitoring and Verification
- Selo Verde: 41%
- AFI: 18%
- GTPS: 82%
- Beef On Track: 82%
- Cerrado Protocol: 64%
- CGF FPC Beef WG: 45%

#### 7.2 Establishing a Traceability System
- Selo Verde: 45%
- AFI: 27%
- GTPS: 45%
- Beef On Track: 9%
- Cerrado Protocol: 9%
- CGF FPC Beef WG: 41%

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Comparative Analysis of Sustainable Beef Protocols, Platforms, and Initiatives | June 2022
8. Information Disclosure

- Selo Verde: 67%
- AFI: 33%
- GTPS: 33%
- Beef On Track: 50%
- Cerrado Protocol: 100%
- CGF FPC Beef WG: 33%

9. Supplier Violation Management

- Selo Verde: 100%
- AFI: 100%
- GTPS: 100%
- Beef On Track: 50%
- Cerrado Protocol: 50%
- CGF FPC Beef WG: 50%

10. Managing Review and Claims

11. Management System and Personnel
Agricultural commodity production can be done in a way that meets global demand and works for the natural environment where commodities are grown, benefits the people who live and work there, and in a way that creates a resilient climate.

At Proforest, we focus on the production base and supply chains of agricultural and forestry commodities including soy, sugar, rubber, palm oil, cocoa, coconut, beef and timber. We have more than twenty years of practical experience in supporting companies, governments, communities and partners, to establish responsible production and sourcing practices in Asia, Africa, Latin America and the Caribbean, Europe and North America. We support companies with direct action to tackle environmental and social risks throughout a supply chain. We also work with governments, companies, and collaborative organisations, in order to address systemic issues beyond the supply chain, within a landscape or a sector, to deliver positive outcomes at scale. We bring expertise in these environmental and social issues that drive our work, including protecting and restoring forests and natural ecosystems, conserving biodiversity, advancing gender equality and human rights.

To drive real change, we believe there needs to be a foundation of good governance. We support this through creating and facilitating multi-stakeholder platforms; developing tools and guidance; providing policy advice; and delivering training to build capacity and ensure local benefits and local ownership of issues in the places commodities are produced.

Visit our website to see an overview of projects we’ve worked on and to meet our global team. You can also find training and resources on the Proforest Academy.

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E: latinoamerica@proforest.net

Proforest is registered as a non-profit organisation (Associação Civil sem fins lucrativos) with the name Associação de Pesquisa e Educação Proforest do Brasil (CNPJ Registration number 17.493.676/0001-67).