



**RADAR
VERDE**

BEEF TRANSPARENCY IN THE BRAZILIAN AMAZON



RADAR VERDE EUROPEAN UNION

The extent to which slaughterhouses licensed to export to the European Union demonstrate control over suppliers to avoid deforestation in the Amazon.

2025



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Executive summary

As climate shocks increase food-security risks and Amazon deforestation further undermines rainfall and production stability, the Radar Verde report becomes essential for identifying where cattle supply chains remain exposed and where urgent action can reduce environmental and market risk. Against this backdrop, a practical question becomes more pressing: how can Brazil preserve market access, regulatory predictability, and commercial trust in its beef sector in an environment where traceability and product origin are becoming more relevant for export-oriented supply chains, especially those exposed to European requirements? The report's central argument is that the beef sector should provide credible and transparent evidence on the implementation of zero-deforestation policies, with particular attention to indirect cattle suppliers. This would strengthen the sector's position with European buyers, improve risk visibility for financiers, and expand implementation capacity for regulators in Brazil and Europe.

The report places this challenge in a context of rapid commercial and regulatory change. The European Union has become more relevant for Brazilian beef exports while raising the standard of proof required for compliance. In 2025, it imported 128.9 thousand tonnes of Brazilian beef, worth US\$1.06 billion, a 132.8% increase over 2024. At the same time, the European Union Deforestation Regulation (EUDR) requires due diligence and geolocation-based controls for cattle and related products, including information on all establishments where animals were kept. As a result, verifiable origin has become increasingly important for sales continuity, access to higher-value markets, and regulatory risk management in the export segment.

Brazil already has important building blocks to meet these requirements, but they remain incomplete for deforestation-related due diligence. Since 2000, the European Union has required individual traceability for animals destined for slaughter, and Brazil's SISBOV system, regulated by the Ministry of Agriculture and Livestock, supports this sanitary traceability. In 2025, 1,234 farms were authorized to supply cattle to slaughterhouses exporting to the European Union. However, SISBOV identifies animals only up to 90 days before slaughter and does not consistently capture the full production trajectory when the farm of origin differs from the final fattening property. Under EUDR, compliance requires coupling this traceability with geolocation and land-use information across all establishments where the animal was kept.



The report's evidence shows that this challenge has already reached meaningful scale. In 2025, 15 slaughterhouses owned by eight companies in the Legal Amazon, all located in Mato Grosso, were authorized to export to the European Union, with a combined capacity of 11,250 head per day. In 2024, there were 8 slaughterhouses, owned by 6 companies, with a capacity of 5,870 head per day. At the same time, the risk of new deforestation within their potential sourcing zones ranged from 31,000 to 2.8 million hectares. The report also states that 80% of slaughterhouses demonstrate some control over direct suppliers, yet none demonstrate robust evidence, such as external audits, of control over indirect suppliers. Overall, 87% of assessed units fell into the low-control category and 13% into the very low-control category.

The central vulnerability therefore lies in the indirect segment of the cattle supply chain, where animals may spend most of their lives before final fattening. This is the point at which deforestation risk becomes harder to exclude if monitoring covers only direct suppliers. Brazil has additional initiatives that can support progress, including the Rural Environmental Registry (CAR), the Animal Transit Guide (GTA), the National Program for the Individual Identification of Cattle and Buffalo (PNIB), AgroBrasil+Sustentável, Selo Verde platforms, and audits linked to the Conduct Adjustment Agreement (TAC). Yet the report shows that these systems still face important constraints. CAR remains self-declared and unevenly validated. GTA tracks batch movements rather than individual animals, remains fragmented, is not publicly accessible, and is not systematically linked to environmental compliance. TAC audits have improved controls for direct purchases but do not provide independent assurance for indirect suppliers. In addition, PNIB becomes mandatory only from 2030, and Pará's individual cattle traceability system, SRBIPA, has also been postponed to 2030.

In this context, Radar Verde adds value as a practical tool for decision-making and coordination to fast-track solutions. The platform translates company commitments into comparable signals of ambition, implementation, and transparency. Buyers can use it to screen suppliers and guide lower-risk sourcing. Financial institutions can use it to support credit analysis, investment decisions, and engagement with companies. Regulators can use it to focus enforcement, data-sharing agreements, and incentives where additional effort is likely to make the biggest difference. By comparing plants and companies, Radar Verde helps identify which actors are better positioned to adapt, which jurisdictions present lower deforestation risk, and where corrective action should be concentrated.



1 Introduction

The climate crisis is already increasing food-security risks (through extreme heat, droughts, and hydrological shocks), and Amazon deforestation amplifies these risks by weakening moisture recycling and reducing regional rainfall—raising the probability of production and logistics disruptions. (IPCC, 2022; Flores et al., 2024; Qin et al., 2025).

In 2024, Brazil emitted 2.145 GtCO₂e (gross; GWP-AR5), and the beef sector’s climate exposure spans both direct agricultural emissions and emissions from Land-Use Change and Forests (deforestation and conversion), which together account for most of the national inventory¹ (Observatório do Clima/SEEG, 2024).

For European retailers and financial institutions, this climate reality increasingly translates into regulatory, material, and reputational risk. While the EU still represents a limited share of Brazil’s export volume, in 2025 it imported 128.9 thousand tonnes of Brazilian beef (US\$ 1.06 billion) and was among the fastest-growing destinations (+132.8% vs. 2024), making compliance with European rules commercially relevant for a growing segment of trade (ABIEC, 2026). From 30 December 2026 (and 30 June 2027 for micro and small operators), the EU Deforestation Regulation (EUDR) requires due diligence and geolocation-based controls for commodities such as cattle and derivatives, while the Corporate Sustainability Due Diligence Directive (CSDDD) strengthens obligations to manage environmental and human-rights impacts across global value chains (Council of the European Union, 2025; European Commission, 2024; Reuters, 2025). In addition, the EU-Mercosur agreement includes a Trade and Sustainable Development chapter, designates the Paris Agreement as an “essential element,” and contains commitments to protect forests and tackle deforestation—reinforcing the idea that market access and reputation will increasingly depend on verifiable evidence of deforestation-free production (European Commission, n.d.; Reuters, 2024).

This is where Radar Verde is useful. This report assesses whether slaughterhouses authorized to export beef from the Brazilian Amazon to the European Union provide consistent evidence of policies and mechanisms to prevent deforestation in their supply chains—including the critical risk of leakage through indirect suppliers and “cattle laundering,” widely documented as a major operational and reputational gap (Radar Verde, 2025; AP News, 2025). By translating commitments into comparable signals of ambition, implementation, and transparency, Radar Verde supports purchasing, financing, and engagement decisions (and the prioritization of improvements) in a market where climate, regulation, and brand risk are rapidly converging.



2 European market requirements for Brazilian beef

2.1 Origin tracking for health security

Since 2000, the European Union has required individual traceability of animals destined for slaughter. MAPA Normative Instruction No. 51 of 2018 establishes the Brazilian System of Individual Identification of Cattle and Buffaloes – SISBOV, which establishes rules for exporting meat to markets that require individual traceability. However, this traceability allows identifying the animals only up to 90 days before slaughter, and does not record the property of origin if it differs from the fattening property. This requirement is for sanitary reasons, not for socio-environmental control. Not all properties in Brazil are authorized to supply cattle to slaughterhouses to produce beef destined specifically for the EU; the list of approved properties is updated annually by the Ministry of Agriculture and Livestock (Mapa). In 2025, 1234 farms were authorized to supply cattle to slaughterhouses that export to the EU, located in states such as Espírito Santo, Goiás, Minas Gerais, Mato Grosso do Sul, Mato Grosso, Paraná, Rio Grande do Sul and São Paulo (Graph 1 & Figure 1).

Graph 1. The number of rural establishments qualified for the EU in 2025.

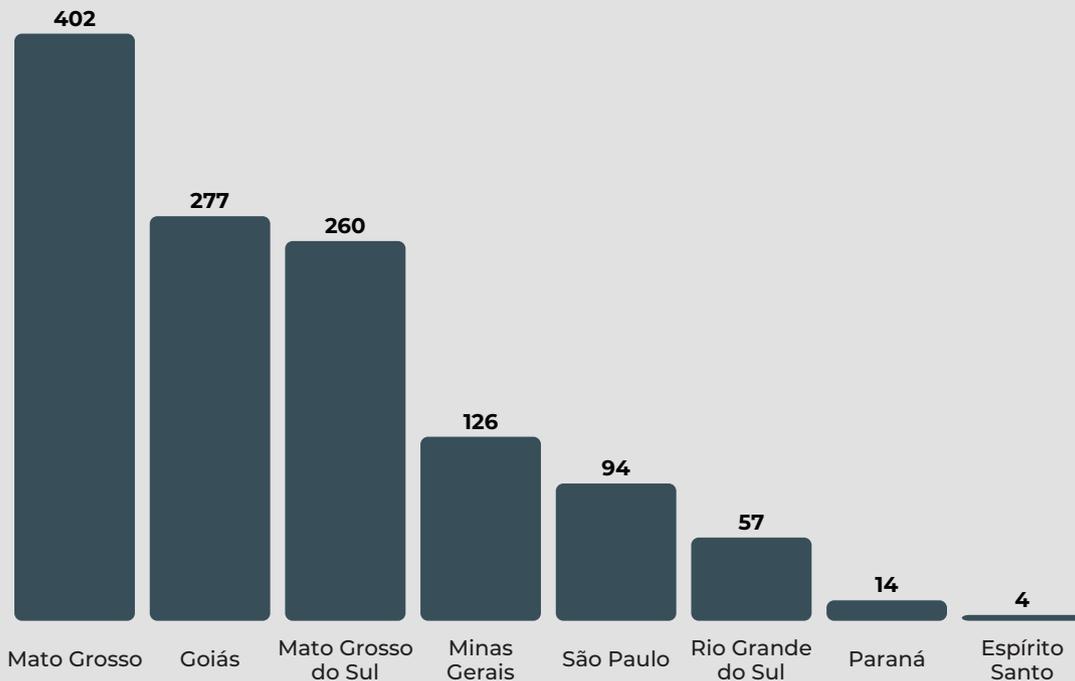
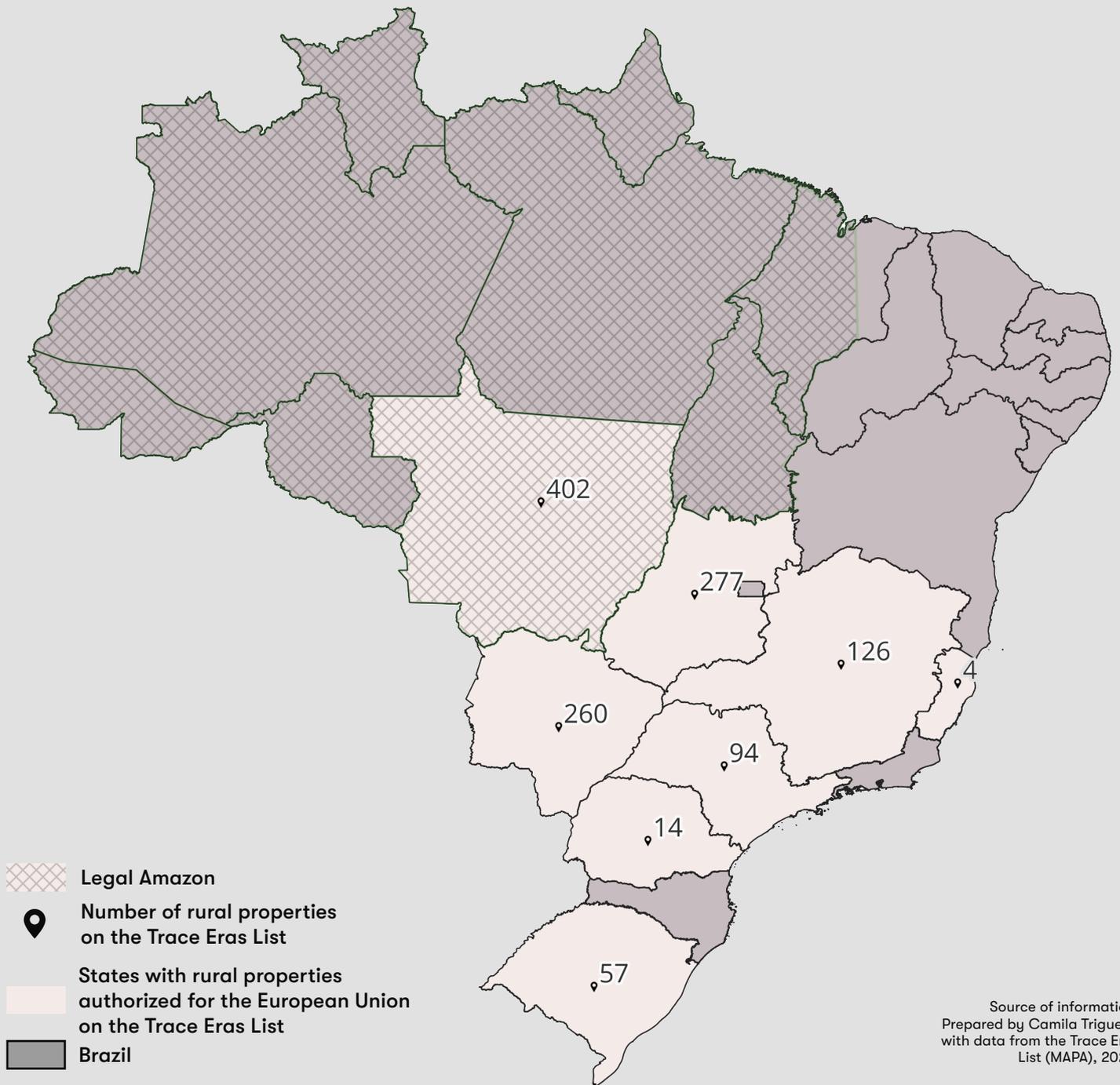


Figure 1. Geographic distribution of rural establishments qualified for the EU on the Trace Eras List.



Source of information:
Prepared by Camila Trigueiro
with data from the Trace Eras
List (MAPA), 2025.



2.2 Risk analysis and origin tracking to avoid products associated with deforestation.

According to the EUDR, any operator or trader placing relevant commodities on the EU market or exporting them from the Union must be able to demonstrate that these products do not originate from areas subject to recent deforestation or forest degradation. Following two years of postponed implementation, companies trading with the European Union will be required to comply with the regulation by 2027. While the original framework foresaw an 18-month adaptation period from the regulation's entry into force, extended timelines continue to apply for micro and small enterprises.

2.2.1 Operators must collect information, documents, and data demonstrating that commodities comply with the due diligence mandated by regulation. To this end, the operator must collect, organize, and maintain information, accompanied by evidence, related to each product for five years from the date of export. We highlight below some of the information that is relevant to the case of livestock (Adapted from article 9 of EUDR, 2023):

- Adequately conclusive and verifiable information that the products are deforestation-free;
- Adequately conclusive and verifiable information that the commodities were produced in accordance with the prevailing legislation of the country of production, including any provision conferring the right to use the respective area for the purposes of producing the commodity;
- The geolocation of all parcels of land where the commodities that the product contains, or were made, were produced, as well as the date or time range of production;
- When a product contains or has been made with commodities produced on different parcels of land, the geolocation of all the different parcels of land should be included;
- Any deforestation or forest degradation on the provided parcels of land automatically disqualifies all commodities and products from these parcels of land from being placed or made available on the market or exported;



- For products that contain or have been produced using livestock and for other relevant products that have been fed with these products, geolocation should refer to all establishments where the livestock has been kept;
- For all other relevant Annex I products of the Act, geolocation shall refer to parcels of land.

Operators must review the information collected and any relevant documentation to assess whether there is a risk that products may not comply with regulatory requirements. Products should only be placed on the market or exported if the assessment indicates no or an insignificant risk of non-compliance, considering the following criteria (Adapted from article 10 of the EUDR, 2023):

- The attribution of risk to the country of production or parts thereof (in accordance with Article 29 of the regulation);
- The presence of forests in the country of production or parts thereof;
- The presence of Indigenous peoples in the country of production or parts of it;
- Consultation and cooperation in good faith with Indigenous peoples in the country of production or parts thereof;
- The existence of duly substantiated claims by Indigenous peoples based on objective and verifiable information about the use or ownership of the area used for the production of the relevant commodity;
- Prevalence of deforestation or forest degradation in the country of production or parts thereof;
- The source, reliability, validity, and connections to other available documentation of the information referred to in Article 9;
- Concerns related to the country of production and origin or parts thereof, such as the level of corruption, prevalence of falsification of documents and data, lack of law enforcement, international human rights violations, armed conflicts, or the presence of sanctions imposed by the United Nations Security Council or the Council of the European Union;



- The complexity of the supply chain and the stage of processing the products, in particular, the difficulties in connecting the relevant products to the parcel of land where the commodities were produced;
- The risk of circumventing this regulation or mixing with products of unknown origin or produced in areas where deforestation or forest degradation has occurred or is occurring;
- Conclusions of the meetings of the Commission's expert groups supporting the implementation of this regulation, as published in the Commission's Register of Expert Groups;
- Substantiated concerns raised under Article 31 of this regulation and information on the history of non-compliance of traders or traders along the supply chain with this regulation;
- Any information that points to a risk that the relevant products will not be compliant;
- Additional information regarding compliance with this regulation, which may result from certification or other third-party verified schemes such as voluntary schemes recognized by the Commission under Article 30(5) of Directive (EU) 2018/2001 of the European Parliament and of the Council (21), provided that the information meets the requirements set out in Article 9 of this regulation;
- Operators must document and review risk assessments at least annually and make them available to competent authorities upon request;
- Operators must be able to demonstrate how the collected information has been verified against established risk assessment criteria and how they determine the degree of risk.



3. Performance of zero deforestation policies by Amazon slaughterhouses that export to the European Union (EU)

In 2025, 15 slaughterhouses, belonging to eight companies, in the Legal Amazon were licensed to export to the European Union. All of them were located in the state of Mato Grosso and had a total slaughter capacity of 11,250 animals per day (Figures 2 and 3).

Compared with 2024, the number of slaughterhouses and the overall slaughtering capacity of companies exporting to the European Union have nearly doubled (2024 data: 8 slaughterhouses operated by 6 companies, with a daily slaughtering capacity of 5,870 head of cattle). The current figures demonstrate a significant expansion in both infrastructure and production capacity, reflecting the growing relevance of these companies in the European market.

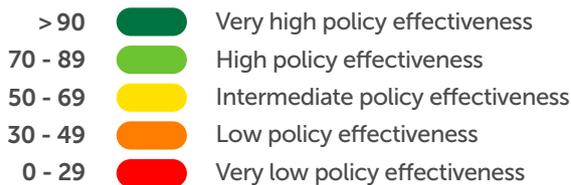
The risk of new deforestation within the potential purchase zones of these slaughterhouses ranged from 31,000 to 2.8 million hectares. Despite this high level of environmental risk, no beef company responded to Radar Verde's questionnaire to demonstrate effective control over its beef supply chain. Therefore, none of the companies meet the EUDR requirements regarding information disclosure and sourcing products from areas with high deforestation risk.

Eighty percent of the slaughterhouses in the Amazon that export beef to the European Union demonstrate control over their direct suppliers, but none demonstrate, with robust evidence (external audits) the control over their indirect suppliers. In such conditions, deforesting indirect suppliers may sell calves or young cattle to fattening ranches that supply cattle to beef companies. Hence, overall, the effectiveness of slaughterhouses' zero policies is low or very low (Figures 2 and 3). More specifically, 87% of the listed slaughterhouses demonstrated low control over their supply chains, while 13% exhibited very low control. This performance does not meet the requirements of the EUDR, as the regulation also requires origin tracking of indirect suppliers.



Figure 2. Radar Verde results for slaughterhouses operating in the Legal Amazon and licensed to export beef to the European Union.

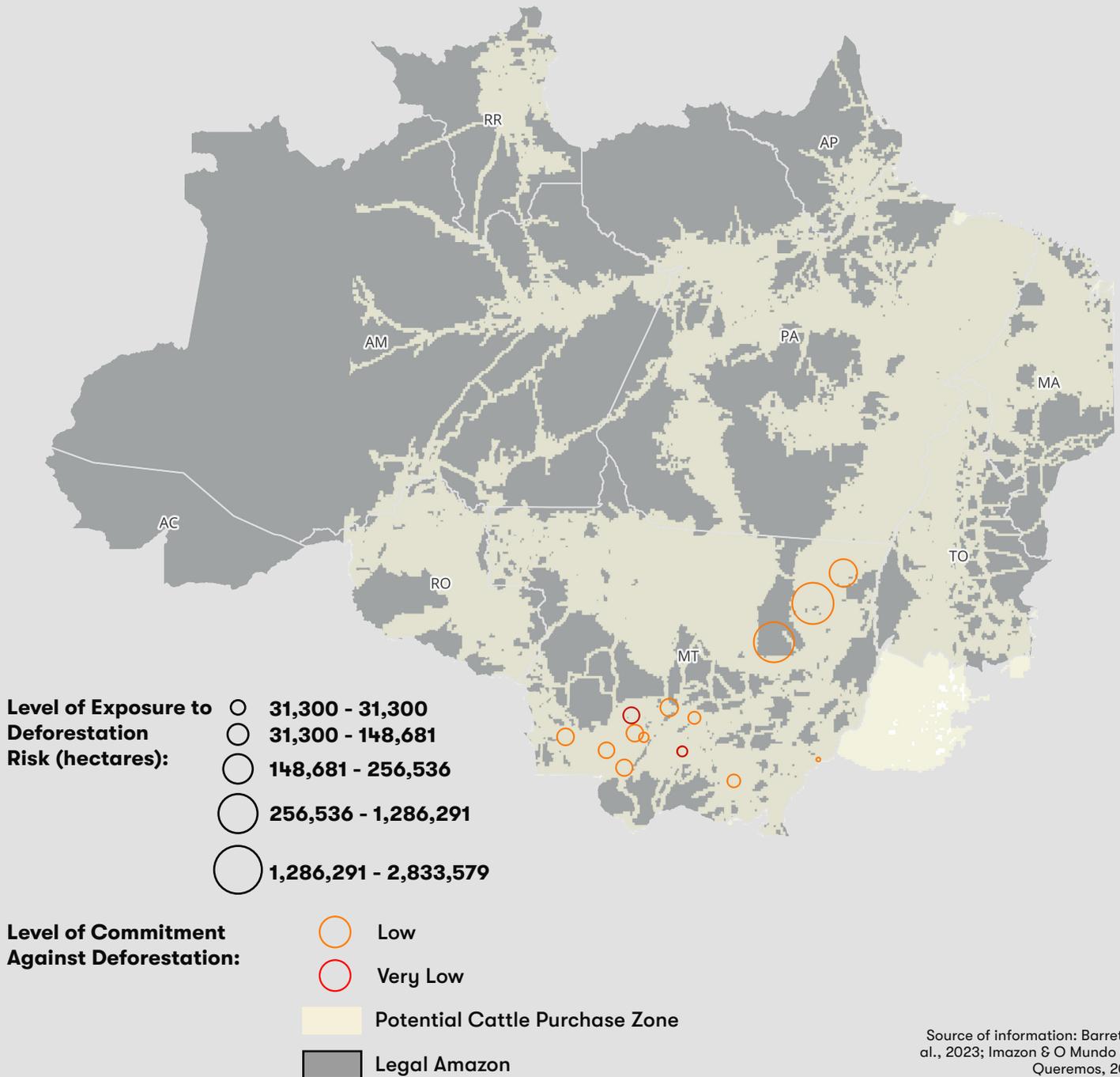
SLAUGHTERHOUSE	SIF	UF	MUNICIPALITY	SLAUGHTER CAPACITY (HEAD/DAY)	MAXIMUM DISTANCE FOR CATTLE PURCHASE (KM)	SIGNATORY OF THE FEDERAL PROSECUTORS SETTLEMENT AGREEMENT AGAINST DEFORESTATION (TAC)?	LEVEL OF OF COMMITMENT AGAINST DEFORESTATION			LEVEL OF EXPOSURE TO DEFORESTATION RISK (HECTARES)	DID THE COMPANY SHARE ANY ADDITIONAL INFORMATION? (GRAY - NO; BLUE - YES)
							DIRECT SUPPLIER (DIRECT FARMS)	INDIRECT SUPPLIER (INDIRECT FARMS)	OVERAL SCORE		
Marfrig Global Foods S/A	2015	MT	VÁRZEA GRANDE	250	360	YES	78	2.9	40.4	144,419	
JBS S/A	3000	MT	DIAMANTINO	800	350	YES	75.7	2.4	39.1	510,480	
JBS S/A	3470	MT	CONFRESA	600	300	YES	75.7	2.4	39.1	1,286,291	
JBS S/A	4268	MT	COLÍDER	880	350	YES	75.7	2.4	39.1	2,683,851	
JBS S/A	2979	MT	ARAPUTANGA	1,500	500	YES	75.7	2.4	39.1	464,004	
JBS S/A	2019	MT	PEDRA PRETA	600	500	YES	75.7	2.4	39.1	226,685	
JBS S/A	42	MT	BARRA DO GARÇAS	1600	390	YES	75.7	2.4	39.1	31,300	
JBS S/A	51	MT	PONTES E LACERDA	1,200	500	YES	75.7	2.4	39.1	461,972	
Minerva	2911	MT	MIRASSOL D'OESTE	900	500	YES	74.4	2.9	38.6	437,495	
Minerva	2500	MT	PARANATINGA	500	300	YES	74.4	2.9	38.6	402,670	
Vale Grande Indústria e Comércio de Alimentos S/A (Frialto)	4490	MT	MATUPÁ	400	350	YES	74.4	0	37.2	2,833,579	
Naturafriq Alimentos Ltda*	1811	MT	BARRA DO BUGRES	500	300	YES	73.3	0	36.7	135,319	
Agra Agroindustrial De Alimentos S/A	3941	MT	RONDONÓPOLIS	320	500	YES	68	0	34	256,536	
Pantaneira Indústria E Comércio De Carnes E Derivados	1206	MT	VARZEA GRANDE	500	360	YES	0	0	0	148,681	
FORTUNCERES S.A	1751	MT	TANGARÁ DA SERRA	700	400	YES	0	0	0	419,350	



* The slaughterhouse is not authorized to export to the EU but is approved to export to the UK, which left the EU in 2020 (Brexit); nevertheless, it is included in the assessment because the UK is located in European territory.

Source of information: Barreto et al., 2023; Radar Verde, 2025.

Figure 3. Slaughterhouses licensed to export to the European Union(EU): Level of Commitment Against Deforestation, Level of Exposure to Deforestation Risk and Potential Cattle Purchase Zones



Source of information: Barreto et al., 2023; Imazon & O Mundo Que Queremos, 2025.



4 Discussion

Climate change is already reshaping food systems, and deforestation remains one of the fastest ways to undermine both climate stability and long-run agricultural productivity. In Brazil, land-use change remains a dominant source of greenhouse gas emissions, making decoupling cattle production from forest loss a core mitigation and food security strategy (SEEG, n.d.). (seeg.eco.br) As an investor in global food value chains, the European Union has leverage to accelerate this decoupling—provided that compliance incentives align with practical, verifiable traceability.

Radar Verde’s results indicate that EU-eligible exporters operate in high-deforestation-risk geographies while still lacking robust, transparent controls. The central vulnerability is the “indirect” segment of the cattle supply chain (calving and rearing farms), where animals may spend most of their lives before moving to a “direct” finishing farm that sells to slaughterhouses. This structure enables “cattle laundering” and makes it difficult to exclude deforestation risk if monitoring is limited to direct suppliers (Levy et al., 2023; Sevilla & colleagues, 2025). ([ScienceDirect](#)) The EUDR’s geolocation requirements sharpen this point: for cattle, operators must geolocate all establishments where animals were kept, which in practice requires visibility across indirect supplier chains—not only the final farm (European Commission, n.d.; EEAS, 2024). ([Green Forum](#))

Appendix 1 shows that Brazil is building pieces of the traceability and transparency infrastructure, but none is yet a complete, near-term solution for EUDR-grade due diligence. Some initiatives are operational but constrain transparency: AgroBrasil+Sustentável integrates official databases but restricts access to landholders and companies, limiting independent monitoring; SeloVerde-PA is a public platform that integrates environmental/land and geospatial datasets and covers direct and indirect suppliers, yet it is not an official certification/audit and (critically) does not provide access to GTA movement records, which constrains independent verification of indirect chains. Other systems remain too slow for the EUDR timeline: Pará’s individual traceability framework (SRBIPA) has been postponed to 2030, and the national individual identification program (PNIB) becomes mandatory only from 2030 onward.

Meanwhile, foundational instruments that exist today still have structural limits: CAR is self-declared and unevenly validated; GTA captures batch movements (not individual animals) and is fragmented and not publicly accessible, and it is not systematically linked to environmental compliance; and TAC audits have improved controls for direct purchases but do not provide independent assurance for indirect suppliers. Together, these constraints explain why “compliance-ready” traceability at scale is still a governance and data-integration problem—not a lack of initiatives.



Given the current EUDR implementation timeline (now expected to apply from 30 December 2026 for large/medium operators and 30 June 2027 for micro/small operators), a pragmatic pathway is to prioritize enforceable, risk-based interoperability rather than waiting for full individual traceability in 2030 (European Commission, n.d.). ([Green Forum](#)) EU and Brazilian authorities could collaborate on two near-term steps. First, accelerate controlled integration of GTA movement data with CAR-linked property boundaries and deforestation/embargo layers to approximate indirect-supplier exposure at the transaction level—an approach already demonstrated as technically feasible in the literature (Brandão Jr. et al., 2023). ([MDPI](#)) Second, use Radar Verde’s plant/company benchmarking to target enforcement, data-sharing agreements, and procurement incentives where they can deliver the highest marginal impact (e.g., prioritizing companies with stronger policies and jurisdictions with lower deforestation risk, while concentrating corrective action on persistent high-risk clusters).

Finally, cost arguments are unlikely to justify delay. Profundo’s assessment suggests EUDR compliance costs are modest on average (about 0.10% of annual revenues; ~0.17% for SMEs), with very small potential consumer price effects if passed through supply chains (Profundo, 2025). ([profundo.nl](#)) This implies that the binding constraint is less “cost” than governance: data access, standardization, and credible verification for indirect supplier chains. Aligning Brazil’s emerging public platforms with transaction-level movement data—and aligning EU due diligence expectations with a staged but measurable compliance pathway—offers a realistic route to deforestation-free beef that supports climate resilience and food security.



5 Appendix 1. Examples of Brazilian initiatives related to land use and the beef supply chain.

Several initiatives in Brazil promise to improve traceability and sustainability in the beef supply chain (Table 1). However, they are insufficient or will take a long time to fully implement.

At the national level, the AgroBrasil+Sustentável platform integrates official agricultural and environmental databases to support due diligence processes (MAPA, 2024). However, access to this tool is restricted to producers and companies, limiting public transparency and, in turn, the assessment of compliance along the beef supply chain.

In parallel, the National Program for the Identification of Bovines and Buffaloes (PNIB) establishes the basis for individual animal identification in Brazil (MAPA, 2022), but mandatory identification is only foreseen to begin in 2030.

At the subnational level, the State of Pará's Individual Cattle Traceability System (SRBIPA), originally expected to enter into force in 2026, has also been postponed to 2030 (ADEPARÁ, 2024; REUTERS, 2025). Although the state of Pará does not export beef directly to the European Union, evidence from cattle movement records indicates that Pará supplies live cattle to exporting states such as Mato Grosso, which formally access the EU market, underscoring the relevance of national traceability.



Table 1. Examples of Brazilian initiatives on beef supply chain traceability and their current status in relation to the EUDR.

INITIATIVE	LEVEL	MAIN OBJECTIVE	CURRENT STATUS	KEY LIMITATIONS
AgroBrasil+Sustentável	National	Integrate official agricultural and environmental databases to support due diligence and market access under sustainability requirements	Operational (since 2025)	Access to information is limited to landholders and companies; lack of public transparency prevents independent monitoring.
SRBIPA – Pará State Individual Cattle Traceability System	Pará State	Enable full individual cattle traceability in a high-deforestation-risk region	Legal framework approved; entry into force postponed from 2026 to 2030	Implementation delays and resistance from the productive sector; limited current coverage
PNIB – National Program for the Identification of Bovines and Buffaloes	National	Establish a national system for individual identification and traceability of cattle and buffaloes	Implemented in phases; mandatory individual identification only from 2030 onward	Long implementation timeline; not yet effective for EUDR compliance in the short term
SeloVerde-PA (Pará public traceability platform)	State (Pará)	Public, free platform that assesses Forest Code compliance and provides transparent traceability of direct and indirect cattle suppliers (and soy producers) by integrating official environmental, land-tenure and geospatial datasets.	Operational (launched 2021; updated/expanded version released 2025). (Agência Pará, 2025; SeloVerde-PA, 2025)	Not an official certificate/audit; relies on CAR and administrative datasets (quality/validation constraints). Public interface does not provide access to GTA movement records, limiting independent verification of animal movements for indirect chains. (SeloVerde-PA, 2025; Repórter Brasil, 2023)
SeloVerde-MG (Minas Gerais public traceability platform)	State (Minas Gerais)	Public, free platform providing socio-environmental diagnostics and automated monitoring of properties, including a supply-chain risk assessment module for the bovine sector to support deforestation-free sourcing and EUDR preparedness.	Operational; new version expanded to bovine supply chains and integrated >1.1 million rural properties (2025). (Governo de Minas Gerais, 2025)	Depends on CAR and other registries; certificates/diagnostics are not a substitute for transaction-level traceability and operator due diligence under EUDR; requires data sharing and buyer integration to cover the full indirect chains. (Governo de Minas Gerais, 2025)
SIFMA/Selo Verde (Maranhão)	State (Maranhão)	Public system integrating fiscal and environmental/geospatial information to increase traceability and transparency of agribusiness supply chains and enable automated verification/monitoring of rural registries.	Under development/expansion (technical rollout and integration of a SeloVerde module reported in 2024–2025). (SEMA Maranhão, 2024; WRI Brasil, 2025)	Scope and operational maturity for cattle traceability are still evolving; effectiveness depends on data integration across agencies and governance for enforcement and disclosure. (SEMA Maranhão, 2024; WRI Brasil, 2025)
SeloVerde Acre (Acre)	State (Acre)	Public, free digital platform (in partnership with CIT/UFMG) to generate detailed socio-environmental diagnostics, assess Forest Code compliance, and support transparent monitoring/traceability and environmental/land regularization.	Pilot/testing phase reported; daily integration of public datasets and planned expansion across supply chains. (Secretaria de Estado do Meio Ambiente do Acre, n.d.)	Still in testing; relies on CAR and official datasets; the extent of operational coverage for indirect cattle-supplier traceability will depend on implementation details and data availability. (Secretaria de Estado do Meio Ambiente do Acre, n.d.)
SeloVerde Tocantins (Tocantins)	State (Tocantins)	Implementation of a public traceability platform for soy, beef and forest products, coupled with CAR 2.0, to automate Forest Code/CAR compliance analysis and publish compliance status for CAR-registered properties.	Implementation supported with an execution period of Mar 2025–May 2026. (AL-INVEST Verde, 2025)	Implementation phase; outputs depend on CAR 2.0 rollout and state-federal data integration; not a substitute for operator-level due diligence if transaction-level linkages are missing. (AL-INVEST Verde, 2025)
SeloVerde Mato Grosso do Sul (Mato Grosso do Sul)	State (Mato Grosso do Sul)	Adaptation/development of SeloVerde for planted forests, bovine livestock and soy to support public monitoring and traceability and improve compliance with deforestation-free market requirements.	Implementation/adaptation supported by AL-INVEST Verde with state environmental agencies (ongoing as of 2025). (AL-INVEST Verde, 2025)	Implementation phase; effectiveness depends on integration with CAR and other datasets and on operational procedures for cattle movement/supply-chain linking. (AL-INVEST Verde, 2025)
Programa Selo Verde Brasil (federal sustainability label)	National (Brazil)	Federal program to develop national guidelines for certification and conformity assessment of products/services with socio-environmentally responsible life cycles, intended to support market access and competitiveness.	Instituted by Decree No. 12.063/2024; implementation involves technical standards (ABNT) and Inmetro accreditation arrangements; gradual rollout discussed through 2025–2026. (Brasil, 2024; MDIC, 2024, 2025)	A voluntary certification framework—distinct from a cattle traceability system; certification criteria and product-specific standards are being developed and will not, by itself, replace EUDR operator due diligence obligations. (Brasil, 2024; MDIC, 2024)
Federal Prosecutors Office settlement agreement with beef companies (TAC)	Subnational / Regional	Signatories slaughterhouses agree to buy cattle only from deforestation-free ranches	Active in all Amazonian States	Independent audit of compliance available only to direct cattle suppliers.
CAR – Rural Environmental Registry	National	Register rural properties and identify legal reserves and permanent preservation areas	Mandatory nationwide; implementation ongoing	Self-declared data; inconsistencies and overlaps; limited validation and enforcement
GTA – Animal Transit Form	National / State	Track animal movements between farms and slaughterhouses	Operational	Tracks the transportation of loads of cattle (not individual animals). It is not connected to environmental compliance. Fragmented databases; data are not publicly accessible.
Private-sector and multi-stakeholder initiatives (e.g., monitoring of suppliers)	Private / Multi-stakeholder	Improve monitoring of cattle sourcing and reduce deforestation risk	Partial and voluntary adoption	Indirect suppliers remain largely excluded from formal monitoring and traceability systems



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