

September 2023

Soy and legal compliance in Brazil: Risks and opportunities under the EU deforestation regulation

Authors:

André Vasconcelos (Trase), Felipe Cerignoni (Imaflora), Vinícius Silgueiro (ICV), Tiago Reis (Trase), Ana Valdiones (ICV), Marcondes Coelho (ICV)

Research by Trase and Instituto Centro de Vida (ICV), in collaboration with the Agriculture Atlas Program from Imaflora, assesses the compliance of soy production in the Amazon and Cerrado with key elements of Brazil's Forest Code and the implications for meeting the requirements of the new EU deforestation regulation.



Key messages

- The EU's new deforestation regulation (EUDR) requires imports of soy and other agricultural commodities to comply with relevant national regulations of producing countries. Brazil's Forest Code sets out comprehensive requirements for sustainable use of private land. However, weak enforcement and lack of transparency is a challenge.
- Our research found strong evidence that approximately 16% (3 million hectares) of soy production in the Amazon and Cerrado in 2020 was on farms that did not comply with Brazil's Forest Code. Most of this soy is exported to China and the EU. For approximately 74% (14 million hectares) of the soy production, there was some evidence of potential non-compliance. To verify compliance, additional data and enhanced scrutiny from actors within the supply chain are required.
- Poor availability of official data to verify compliance will make it difficult for the soy industry to meet the EUDR's requirements, potentially limiting access of Brazilian soy to the EU market. This is a lost opportunity as around 95% (approximately 18 million hectares) of soy production in the Amazon and Cerrado in 2020 was deforestation– free (not grown on land recently deforested during 2015–2019).
- 4. Implementation of the EUDR provides an opportunity for the EU to engage with the Brazilian government and the soy industry to support the full implementation of Forest Code's mechanisms and ensure that official data is fully and consistently available.





Contents

Executive Summary	3
Introduction	5
Brazilian environmental regulations and methodological approach	6
How much soy production does not comply with the Forest Code?	7
The EU's exposure to non-compliant soy	9
What are the implications for the EU deforestation regulation?	9
Conclusion and recommendations for action	12



Executive Summary

🍉 trase

This policy briefing assesses the level of compliance of soy production in the Amazon and Cerrado with key elements of Brazil's Forest Code. It discusses the implications of the findings for the European Union's deforestation regulation (EUDR), which applies to traders exporting soy from Brazil to the bloc. It concludes with several recommendations for governments, companies and financial institutions.

STITUTO

CENTRO

The briefing is based on research by Trase and Instituto Centro de Vida (ICV), in collaboration with the Agriculture Atlas Program (Imaflora). It was conducted by examining official data on deforestation licences for registered farms in all states in the Amazon and Cerrado in 2009–2020¹.

Brazil's Forest Code sets the rules for the amount of deforestation and land-use conversion that can occur on a rural private property. Chief among them is that landowners must first obtain a deforestation licence from the state environmental agency. Any deforestation that occurred without a licence is illegal under Brazilian law. However, the lack of publicly available and comparable licence information in several states makes it difficult to determine the legality of deforestation in many cases.

The Forest Code also requires that minimum amounts of native vegetation within rural properties are preserved as a 'Legal Reserve'. Under certain circumstances, it sets out a process for landowners in breach of these rules to rectify their actions and become compliant. As such, evidence of a lack of native vegetation within the farm as required by the Legal Reserve detected using satellite data does not necessarily constitute illegality. However, the lack of publicly available information on these compensation mechanisms makes it difficult to systematically verify compliance.

The results of the research identified 19 million hectares of soy planted on farms in the Amazon and Cerrado in 2020. Of this, 74% (14 million hectares) was on farms where there was evidence of potential non-compliance, either due to non-authorised deforestation or risk of non-compliance with Legal Reserve requirements (see details in the sections below). To verify compliance, additional data and enhanced scrutiny from actors within the supply chain such as traders, retailers and financiers are required.

Furthermore, 16% (3 million hectares) of the soy production was on farms where there was evidence of both non-authorised deforestation and a lack of native vegetation within the farm as required by the Legal Reserve. The combination of both infringements is strong evidence that these farms were in breach of the Forest Code. The results show that 80% of the soy grown on these 3 million hectares was exported. China received some 44% and the EU 13% of this soy.

This has important implications under the EUDR as it requires traders importing soy into the EU to prove that it has been produced in accordance with national regulations such as the Forest Code. Meeting this requirement is likely to prove difficult because of the lack of transparent data on compliance, potentially limiting access of Brazilian soy to the EU market. This would be a lost opportunity for Brazil's soy industry as our research finds that around 95% (approximately 18 million hectares) of soy production in the Amazon and Cerrado in 2020 was not grown on deforested or converted land between 2015 and 2019.

 Soy and legal compliance in Brazil: Risks and opportunities under the EU deforestation regulation (methodology)



To address these issues, we recommend that the Brazilian government strengthen and enforce the implementation of the Forest Code's mechanisms and ensure public availability of deforestation licences. It should also allocate more resources to investigate farms where there is evidence of non-compliance and embargo soy from these farms if the evidence is confirmed. The EU should support the development and implementation of already existing national systems in Brazil to fully implement and enforce the Forest Code and therefore to also enable verification of compliance with the EUDR.

We recommend that all soy trading companies should have robust and effective mechanisms to monitor whether suppliers comply with national laws and should request further information from their suppliers when evidence of non-compliance is detected. Traders should also suspend sourcing from non-compliant suppliers and support programmes for producers to regain compliance. Banks and other financial service providers should require soy traders to demonstrate that they do not source soy from noncompliant farms in their due diligence processes.



Introduction

Important international consumer markets for Brazil's agricultural commodities are adopting unprecedented regulations aimed at promoting sustainability within food systems and commodity supply chains. This wave of regulation conveys a strong message to producer countries, urging them to both strengthen the enforcement of their social and environmental regulations, and transition to deforestation-free production of agricultural commodities. These regulatory efforts include the European Union deforestation regulation (EUDR)², the United Kingdom Environment Act's due diligence obligation on forest risk commodities³, as well as regulatory proposals in the United States through the Forest Act bill⁴ and the New York tropical deforestation-free procurement act⁵. These initiatives include a requirement that commodity production must comply with national regulations. Specifically, the EUDR requires that relevant commodities placed on the EU market or exported "have been produced in accordance with relevant legislation of the country of production" (Article 3(b)).

Brazil is one of the world's largest producers and exporters of key agricultural commodities such as soy, coffee, beef, maize and sugar. In order to develop a high standard of sustainable land-use management, Brazil implemented its Forest Code (Law 12651/2012)⁶. The code is a legal instrument that regulates land use and establishes requirements for preserving minimum amounts of native vegetation within rural properties. In addition to setting conservation rules and boundaries, the code introduces a regularisation programme that allows landowners in breach of the law to rectify their actions and become compliant.

This regulatory momentum within consumer markets presents an opportunity to support the implementation of environmental legislation in producer countries, particularly where enforcement has been weak. In Brazil, there are several important mechanisms in its Forest Code that have yet to be fully realised and enforced. These include the validation of the Rural Environmental Registry (Cadastro Ambiental Rural, CAR), the establishment of definitive deadlines for the Programme for Environmental Regularisation (Programa de Regularização Ambiental, PRA), and the upscaling of the Environmental Reserve Quotas (Cotas de Reserva Ambiental, CRA).

The incomplete implementation of these important mechanisms within Brazil's Forest Code poses challenges for proving legal compliance for both the producers and buyers of agricultural commodities. Currently, critical information necessary for demonstrating compliance is either lacking or inaccessible to the public. For instance, in Brazil, deforestation is only legal when authorised by competent environmental enforcement agencies through the granting of a deforestation licence. However, limited public access to licences is a common problem in several Brazilian states⁷.

Consequently, while companies and enforcement authorities in consumer countries can detect deforestation in production areas through satellite imagery, determining the legality of such activities is difficult in most cases. Despite these challenges, Brazil is still ahead of many other producer countries and can serve as an example in terms of transparency, data availability and deforestation monitoring systems.

- 2. Regulation (EU) 2023/1115 of the European Parliament and of the Council.
- 3. Environment Act 2021 (UK) Schedule 17.
- 4. US Forest Act bill
- 5. New York tropical deforestation-free procurement act (S.4859A/ A.5682A).
- 6. Código Florestal.

 Valdiones, A. et al. (2021). Desmatamento Ilegal na Amazônia e no Matopiba: falta transparência e acesso à informação.



The extent to which soy production in Brazil fully complies with various elements of the Brazilian Forest Code remains unclear. This briefing aims to address this knowledge gap by providing an estimate of soy production occurring on farms with evidence of noncompliance or potential non-compliance. Additionally, it assesses the EU's exposure to non-compliance and examines the implications and challenges for the EU in implementing the EUDR. Finally, the briefing offers recommendations on strengthening existing systems to ensure compliance with the Forest Code for European markets.

Brazilian environmental regulations and methodological approach

The Forest Code is Brazil's main legal mechanism that regulates land use, ensures the protection of forests and other ecosystems, and guarantees monitoring of environmental compliance of rural properties. Among many other requirements, the legislation establishes that a proportion of rural farms shall be set aside for the protection and sustainable use of natural resources known as the Legal Reserve. The proportion of the farm that needs to be protected varies from 20% to 80% according to the biome, the type of native vegetation where the farm is located and other factors (see Amaral et al., 2017)⁸. This mechanism sets the rules for the amount of land-use conversion that can occur on a rural private property. The Forest Code therefore allows limited deforestation on private land, providing landowners first obtain a deforestation licence from a competent environmental agency.

The licensing process is a critical step in guaranteeing compliance with the law and achieving sustainable land use, including limiting deforestation and reducing its impact. To receive a licence, applicants must fulfil several requirements, such as proving that there are no abandoned areas within the farm, carrying out field surveys for threatened species, and adopting compensatory measures when threatened species are present. Any deforestation that occurred without a licence is therefore illegal under Brazilian law.

It is required by law that deforestation licences are made publicly available through databases hosted by environmental agencies and via public requests (Law 10.650/2003). In this study we gathered data on publically available deforestation licences issued between 2009 and 2020 for all states in the Amazon and Cerrado. Where data was not publicly available, we made formal requests to the relevant environmental agencies via Brazil's Freedom of Information Law (Law 12.527/2011). Different states across the Amazon and Cerrado have distinct levels of licence data, some with comprehensive datasets that include spatially explicit polygons of the areas authorised for deforestation (e.g. Mato Grosso), while others only provide a single geographical coordinate (e.g. Amazonas, Amapá) (see Valdiones et al., 2021)⁹.

Non-authorised deforestation in this study is defined as any land conversion without evidence of a deforestation licence granted to the land owner by the competent authorities. Due to the lack of consistent information across the states, we took a conservative approach and defined any deforestation on farms that had a single geographical coordinate or a polygon of the deforestation licence as authorised, even if the licence did not precisely match with the real deforested area. For full details, see the methodology document¹⁰. 8. For more details see Amaral, P. et al. (2017). Assessing compliance with the Forest Code: A practical guide.

 Valdiones, A. et al. (2021). Desmatamento llegal na Amazônia e no Matopiba: falta transparência e acesso à informação.

10. Soy and legal compliance in Brazil: Risks and opportunities under the EU deforestation regulation (methodology)



To assess compliance with Legal Reserve requirements on soy farms set out in the Forest Code, we used the approach developed by Rajão et al. (2020)¹¹. It is important to note that while a lack of native vegetation within the farm required by the Legal Reserve indicates potential non-compliance with the Forest Code, it does not directly equate to illegality. This is because the Forest Code permits landowners to offset Legal Reserve debts by paying other landowners who have vegetation that exceeds the Legal Reserve requirements. Landowners can also compensate for Legal Reserve deficits in other properties (owned by the same person) within the same biome. Compensation mechanisms, however, are only available to landowners who have not engaged in deforestation after July 2008. In addition, landowners with Legal Reserve deficits can restore the vegetation and/or adhere to the PRA which brings properties back into compliance. Given the lack of available data, we were not able to account for these cases and therefore our results indicate a risk of non-compliance where more information is needed.

How much soy production does not comply with the Forest Code?

We identified 19 million hectares of soy planted on registered farms in the Amazon and Cerrado in 2020. Of this, 74% (14 million hectares) was on farms where evidence of potential non-compliance was detected, either due to non-authorised deforestation or risk of non-compliance with Legal Reserve requirements (see Figure 1 on next page).

Looking at the details, we found 6.4 million hectares (or 34%) of soy planted in 2020 on farms where non-authorised deforestation took place between 2009 and 2020. This includes deforestation both where the soy was cultivated and on other parts of the property. As described above, deforestation is only legal when farmers obtain a deforestation licence and meet specific criteria.

The results suggest even higher exposure to non-compliance with the Legal Reserve requirements. They show that 10.6 million hectares of soy planted in 2020 in the Amazon and Cerrado were on farms with evidence of a lack of native vegetation within the farm as required by the Legal Reserve and therefore are at risk of non-compliance with a key element of the Forest Code. This represents 56% of the soy area in these two biomes. It is important to note that this does not equate to illegality, as some farms that have not engaged in deforestation after July 2008 can compensate for the lack of their Legal Reserve on other farms and/or can adhere to the PRA.

The lack of publicly available information on these compensation mechanisms makes it difficult for buyers, investors and consumer markets to systematically verify compliance. It allows landowners who benefit from illegal practices to hide among law-abiding producers at the expense of those who adhere to good practices and regularisation programmes. Our analysis points to the areas that require further scrutiny from supply chain actors such as traders, retailers and financiers, and reinforces the need for a national public monitoring system that enforces compliance with the Forest Code.

11. Rajão, R. et al. (2020). The rotten apples of Brazil's agribusiness.





Figure 1: Area of soy in the Amazon and Cerrado, 2020, million hectares (Mha), assessed for compliance with the Brazil Forest Code. We found 3 Mha (16%) of soy planted on farms where (i) non-authorised deforestation took place and (ii) there was a lack of native vegetation within the farm as required by the Legal Reserve. Another 3.4 Mha experienced only non-authorised deforestation (which adds up to a total of 6.4 Mha (34%) facing this issue), while another 7.6 Mha experienced only a lack of native vegetation (which adds up to a total of 10.6 Mha (56%) at risk of non-compliance with Legal Reserve requirements). Source: Trase, Imaflora, ICV.

We also looked at farms where we found evidence of both non-authorised deforestation and a lack of native vegetation within the farm as required by the Legal Reserve. The combination of both infringements brings strong evidence that these farms are in breach of the Forest Code. This was the case for 3 million hectares of soy plantations in 2020, which represents 16% of the soy area in the two biomes. A large proportion of these farms (75%) was concentrated in 100 municipalities, which represents only 10% of all the soy producing municipalities in the two biomes (Figure 2). The highest levels of non-compliant soy were found in the states of Mato Grosso (47%) and Goiás (14%), which are also the states with the largest areas of soy plantations.



Figure 2: Farms with evidence of both non-authorised deforestation and a deficit of Legal Reserve are found across the Amazon and Cerrado, but highly concentrated in some municipalities. Source: Trase, Imaflora, ICV.



trase UNSTITUTO

The EU's exposure to non-compliant soy

A large proportion of the soy produced on farms with strong evidence of breaches of Brazil's Forest Code, due to both non-authorised deforestation and a lack of native vegetation within the farm as required by the Legal Reserve, is linked to exports. We estimate that 80% of this soy was exported to global markets in 2020 and that China is likely to have received around 44%. The EU is the second most exposed market for soy from farms with strong evidence of non-compliance. We estimate that around 13% of this soy was shipped to the EU in 2020 (Figure 3).



Figure 3: China and the EU were the two largest export markets for the 3 million hectares of soy produced in the Amazon and Cerrado in 2020 on farms with strong evidence of non-compliance with Brazil's Forest Code. Source: Trase, Imaflora, ICV.

Furthermore, a significant share (32%) of the 7.7 million tonnes of soy imported by the EU from the Brazilian Amazon and Cerrado in 2020 was likely to have come from farms where non-authorised deforestation took place. And some 16% was likely to have come from farms with both a lack of native vegetation within the farm as required by the Legal Reserve and non-authorised deforestation.

These findings reinforce a previous study that highlights the EU and other global markets as highly exposed to soy contaminated with potential illegalities¹². Importantly, these results suggest that soy buyers and operators may overlook these issues and face challenges in systematically checking legal compliance within their supply chains. As a result they may face obstacles in continuing to export to the EU.

What are the implications for the EU deforestation regulation?

The EU deforestation regulation (EUDR) requires operators and traders to undertake due diligence prior to placing relevant agricultural commodities (including soy) on the market to prove that they did not originate from recently deforested areas (after 31 December 2020) (Article 3a) and were produced in compliance with relevant national legislation of producing countries (Article 3b). As part of due diligence obligations, operators and traders will be required to collect "adequately conclusive and verifiable information that the relevant commodities have been produced in accordance with the relevant legislation of the country of production" (Article 9 (h)). In Brazil, the Forest Code is the primary environmental legislation with which companies will need to demonstrate compliance.

12.Vasconcelos, A. et al. (2020). Illegal deforestation and Brazilian soy exports: the case of Mato Grosso. Trase.



Our results indicate that for Brazilian soy, there is a higher risk of non-compliance with the EUDR legality criteria (Article 3b) than the deforestation-free criteria (Article 3a). Of the 19 million hectares of soy planted in registered farms in the Amazon and Cerrado in 2020, around 95% (or approximately 18 million hectares) was deforestation and land conversion-free. In other words, these plantations were located in areas that had not experienced deforestation between 2015 and 2019. Our results corroborate previous studies which show that most of Brazil's agricultural lands are deforestation and conversion-free^{13,14}. However, in keeping with the findings about the total soy production discussed above, over 70% of this deforestation-free soy comes from farms that may be in breach of Brazil's Forest Code (due to either non-authorised deforestation in other parts of the property (where there is no soy planted) or a lack of native vegetation within the farm as required by the Legal Reserve.

Although it is concerning that a significant portion of soy claimed to be deforestation-free might fail to comply with Brazil's own environmental regulations, solutions for the problem are readily available. Most of the non-compliance risks relate to deficits of Legal Reserve on the properties, and landowners may have already taken steps to regain compliance, including by adhering to the PRA or by purchasing forest certificates from other landowners with a vegetation surplus. This is critical information that soy operators need to request from their suppliers to demonstrate compliance.

Under the EUDR, enforcement agencies in EU member states will need to process vast amounts of information to ensure compliance with both deforestation-free criteria and complex national regulations. Therefore, by adopting a risk-based approach for checks, targeting products coming from areas where there is a high risk of non-compliance, they can implement the regulation more effectively and allocate their limited resources to products which need closer scrutiny. This study highlights the importance that these riskbased approaches for checks take into account both the deforestation and legality risks of non-compliance. Having the right data and information at their disposal will be critical for the successful enforcement of the EUDR. Table 1 (see next page) highlights some of the information and mechanisms that will be important for the competent authorities in EU member states to check when enforcing compliance with Brazil's national environmental regulation.

Additionally, it is crucial to consider compliance with national regulations when the EU develops and implements the risk benchmarking system, particularly when assigning risk levels at a subnational level. This is essential because regions with negligible or low risks for deforestation could pose high risks in terms of compliance with national laws.

The implementation of the EUDR offers a good opportunity to support forest governance and enforcement of Brazil's national regulations. But for this opportunity to materialise, the EU should engage with the Brazilian government and other supply chain actors to help strengthen existing mechanisms and promote initiatives under development in Brazil (see article 30 of the regulation). This includes, for instance, the development of a national traceability system for agricultural commodities currently under discussion by the government. The EU, alongside large soy traders, could also provide finance and other incentives to support farmers to regain compliance with Brazilian national laws and, in turn, comply with the EUDR. While the Forest Code sets out all the necessary regulations to guarantee sustainable land use in private lands, including mechanisms for landowners to regain compliance, enforcement is still a challenge. The EUDR comes at a good time to support Brazilian agribusiness to address this challenge. 13. Rudorff, B. et al. (2021). Análise geospatial da expansão da soja no bioma Cerrado.

14.Rajão, R. et al. (2020). The rotten apples of Brazil's agribusiness.



Table 1: Key Forest Code mechanisms that will be relevant for the implementation of the EUDR. For further details see Amaral, P. et al. (2017)¹⁵.

Key Forest Code mechanisms	Brief description of the legal mechanisms	Dataset and sources
Environmental Rural Registry (CAR)	The CAR is a mandatory public registry for all rural properties in Brazil that integrates information on rural property boundaries and their conservation areas (i.e. Legal Reserves). It provides the basis for monitoring environmental compliance at farm level. As it is a self-declaratory procedure, competent environmental agencies have to validate the information provided by landowners.	Information on properties registered in the CAR system is available through the National System of Environmental Rural Registry (SICAR) website. In addition to the properties boundaries, the SICAR database contains a description of the status of the registration, including whether given property information has been validated or not. Currently, only less than 1% of the properties analysed in this study have been validated by January 2021.
Deforestation licences	The Forest Code allows limited deforestation on private land, but landowners must first obtain a deforestation licence from competent environmental agencies. To receive a licence, applicants must fulfil several requirements, such as proving that there are no abandoned areas within the farm, carrying out field surveys for threatened species, and adopting compensatory measures when threatened species are present.	Deforestation licence records are publicly available for the states of Amazonas, Pará, Mato Grosso, Rondônia, Goiás, Minas Gerais, Ceará e Rio Grande do Sul. In addition, deforestation licences can be accessed through the National System of Control of the Origin of Forest Products (Sinaflor), which has centralised deforestation licences at a federal level. However, it is important to note that the information within the system remains incomplete. For further information see Valdiones et al., 2021 ¹⁶ .
Environmental Regularisation Programme (PRA)	The PRA comprises a set of actions and initiatives that must be undertaken by landowners to adapt and promote the environmental regularisation of their properties. Landowners with a deficit of Legal Reserve can regain compliance through the regeneration or restoration of the native vegetation within the property or by using compensation mechanisms when the area to be compensated was deforested before 22 July 2008.	The availability of spatially explicit data concerning the farms who adhered to PRA remains limited. Currently, Mato Grosso stands out as one of the few states that provides this information in a comprehensive and accessible format.
Environmental Reserve Quotas (CRA)	CRA is an instrument created by the Forest Code to allow offsetting of Legal Reserve deficits between rural properties. Each quota corresponds to one hectare of native vegetation and can be generated by landowners that have a surplus of vegetation according to the minimum required under the Legal Reserve mechanism. The quotas can be used to compensate for the lack of Legal Reserve in other rural properties, provided they meet certain conditions.	A consolidated dataset that offers information regarding implemented quotas is currently absent.

- 15. Amaral, P. et al. (2017). Assessing compliance with the Forest Code: A practical guide.
- 16.Valdiones, A. et al. (2021). Desmatamento Ilegal na Amazônia e no Matopiba: falta transparência e acesso à informação.



Conclusion and recommendations for action

Our findings indicate that approximately 74% (or around 14 million hectares) of soy production in the Cerrado and Amazon during 2020 may not comply with Brazilian national environmental regulations. To verify compliance, additional data and enhanced scrutiny from actors within the supply chain are required. More seriously, we found that 3 million hectares of soy production was located on farms where there is evidence of both non-authorised deforestation and a lack of native vegetation within the farm as required by the Legal Reserve. The combination of both infringements brings strong evidence that these farms are in breach of Brazil's Forest Code.

Verifying compliance with national regulations is a crucial step that soy operators as well as EU competent authorities will have to do under the new EU Deforestation Regulation (EUDR). This will offer an opportunity for the EU to support initiatives and systems in Brazil that enforces environmental compliance at a farm level and decouple deforestation from agricultural supply chains. It is important to recognise that the zero-deforestation approach and the focus on legality are not mutually exclusive; they address different issues and are, therefore, complementary.

Furthermore, our results highlight that the risks of non-compliance associated with soy production are concentrated in specific production areas. This knowledge offers an opportunity to focus incentives, interventions and resources where the risks of non-compliance are highest.

It is critical that governments, traders, buyers and investors are aware of the extent to which soy production may not be in compliance with Brazil's environmental regulations. These players can work together to address this issue, taking specific actions to achieve compliance (see Table 2).

Key players	Issue	Action needed
Brazilian environmental agencies and Federal and subnational governments	We found that at least 16% of the soy production in the Amazon and Cerrado was on farms where there was strong evidence of both non-authorised deforestation and a lack of native vegetation within the farm as required by the Legal Reserve. The combination of both infringements is strong evidence that these farms are in breach of the Forest Code.	 (i) Allocate more resources to embargo farms with evidence of non-authorised deforestation. This is critical to help consumer markets and supply chain companies identify these areas and block non-compliant suppliers, as well as for finance institutions to block rural credits/ investments. (ii) Strengthen and enforce the implementation of the Forest Code and its mechanisms, including the validation of CARs, compliance with the Legal Reserve and the implementation of PRA programmes to reintegrate farmers into compliance and therefore maintain access to the international market. (iii) Ensure public availability of deforestation licences as required by Brazil's Freedom of Information Law (Law 12.527/2011). (iv) Ensure public availability of other important information that allows supply chain actors to verify compliance with the Forest Code, including full details of validated CARs, embargoed areas, a list of farmers who have adhered to PRAs and Terms for the Adjustment of Conduct (Termo de Ajustamento de Conduta). (v) Develop and implement a national public monitoring system that enforces environmental compliance at farm level.

Table 2: Recommended actions for key players to address non-compliance of soy with Brazil's Forest Code



Key players	lssue	Action needed
European Commission	We estimate that approximately 32% of the EU's soy imports from the Brazilian Amazon and Cerrado in 2020 were likely to have come from farms where non-authorised deforestation took place, and some 16% was likely to have come from farms with both deficits of Legal Reserve and non- authorised deforestation.	 (i) Support the development and implementation of national systems in Brazil to enforce national regulations and therefore help to verify compliance with the EUDR. (ii) Provide guidance and support to EU member states on how to verify compliance with producer countries national regulations (article 3b of the EUDR). (iii) Consider compliance with national regulations when developing and implementing the risk benchmarking system, particularly when assigning risk levels at a subnational level.
Traders	Our findings suggest that soy traders are directly exposed to regulatory risks. Trading companies placing soy on the EU market will have to demonstrate to EU competent authorities that their suppliers are deforestation-free and in compliance with different national regulations, including the Forest Code.	 (i) Have mechanisms in place to systematically monitor whether or not suppliers comply with national laws and regulations. (ii) Request deforestation licences when deforestation is detected on their suppliers' farms. (iii) Request further information from suppliers when evidence of deficits of Legal Reserve are detected. (iv) Suspend sourcing from non-compliant suppliers and support the implementation of programmes to bring the farms into compliance with the law.
Financial Institutions	Financial institutions may be unaware that their investments are financing companies and farmers exposed to regulatory risks via their supply chains.	 (i) Febraban (Brazilian Federation of Banks) should extend its recently introduced commitment not to provide credit lines to meatpackers linked to illegal deforestation¹⁷ to the soy industry. Banks should request information from soy traders to demonstrate that they do not source soy from farms that are non-compliant with the Forest Code. (ii) Request that companies and banks have mechanisms in place to demonstrate that they only purchase/produce/finance soy grown on farms in full compliance with national laws.

17. Brazilian banks urged to crack down on meatpackers tied to deforestation.



For further information contact André Vasconcelos, Global Engagement Lead, Trase, a.vasconcelos@globalcanopy.org

Keep connected with Trase for future insights trase.earth.

Trase is a partnership co-founded by the Stockholm Environment Institute and Global Canopy



