



Leather, EU markets and opportunities to reduce deforestation and forest degradation in the Amazon

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24th May, 2021

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Deforestation in the world's most vulnerable forests is rising rapidly. In the Amazon rainforest, deforestation reached a 12 year high of 11,088 square kilometres (km²) in 2020.¹²³⁴⁵ This is a major contributor to climate change, as each hectare of lost forest in the Amazon releases an estimated 550 to 740 tonnes of carbon dioxide equivalent (tCO₂e).⁶ In fact, deforestation emits more greenhouse gases than all of the EU.⁷ If the Amazon continues being cleared, it will soon reach a tipping point, where it will release even more carbon to the atmosphere, and lose its unparalleled ability to store carbon as effectively and regulate the global climate.⁸

However, with the upcoming publication of a new regulation on embedded deforestation risk, the EU has created an unprecedented opportunity to reduce deforestation and forest degradation in global supply chains of commodities placed on the EU market. Any effective regulation should determine which goods fall into scope based on the best available data of products most linked to deforestation, and where the market share is influential. As the expansion of cattle ranching is the leading driver of deforestation in the Brazilian Amazon,⁹ all major cattle product imports would need to be included within the scope of the regulation to adequately limit the share of deforestation in the Amazon reaching any regulatory market.

This report sets out how addressing deforestation linked to leather represents a major opportunity to minimize its impact on deforestation in the Amazon, and that deforestation-free leather is feasible, given that traceability is low cost and already in place in key nodes in supply chains.

Europe is a key market for forest-risk leather

Europe is a key market for leather, especially from South America. Brazilian leather is essential to the Italian tanning industry, which sees €5.2 billion in annual turnover, and accounts for 20% of the total tanning industry turnover worldwide.¹⁰ In 2021, Italy replaced China as the largest export market for Brazilian leather (see figure 1),¹¹ and over 36% of all wet-blue hides imported to Italy came from Brazil, followed by just 14% from the United States.¹² Most of these wet-blue hides exported from Brazil are linked to deforestation risk, as the specialized wet-blue tanneries of 6 of the top 10 exporting Brazilian tanneries are located in the Legal Amazon.¹³

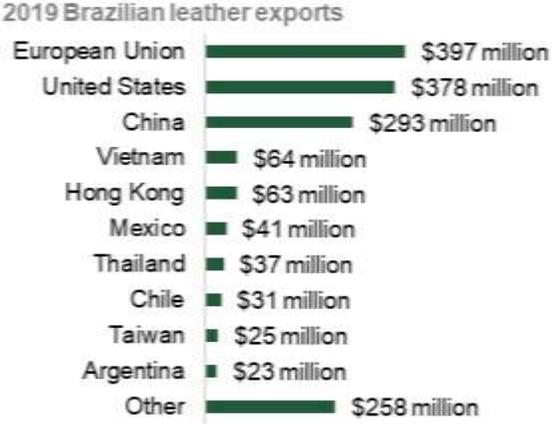


Figure 1. 2019 Leather exports from Brazil. See Appendix A for a full list of HS codes included in the data query. Data is from UN Comtrade. <https://comtrade.un.org/data/>.

Aside from the Italian leather industry, leather is also essential for the European automotive industry. For example, Czechia is the world’s largest manufacturer of car seats, accounting for one fifth of global exports. While only 1% of leather imported to Czechia comes directly from South America, 90% is sourced from other European countries, which themselves import leather from forest-risk countries in South America.¹⁴ In fact, the five largest car manufacturers in Europe, Volkswagen Group, BMW Group, Daimler, PSA Groupe, and Groupe Renault, all source their leather from Brazilian tanneries, which were linked to a total of 1,345,118 million hectares of deforestation that occurred in their buying zones between 2019 and 2021.⁸

When compared with other established forest-risk commodities imported to Europe, the value of leather imports exceeds that of other forest-risk commodities (see figure 2). Additionally, imported leather carries a greater forest-risk than these other commodities entering Europe. 10.6% of raw or tanned hides imported to the EU, a value of \$158 million, come from the forest-risk countries Brazil and Paraguay.

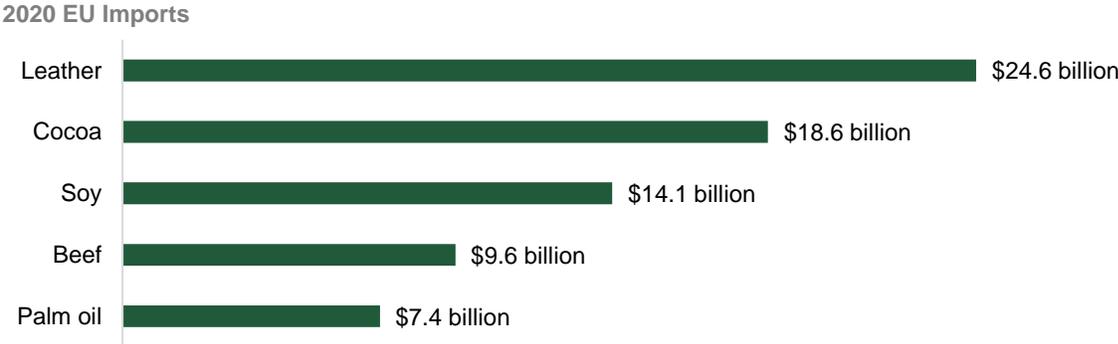


Figure 2. 2020 EU imports of forest-risk commodities. The value of palm oil imports is likely underestimated, as only raw palm forms were included in the search. The value of leather is also high due to the inclusion of finished goods in the data query. See Appendix A for a full list of HS codes and descriptions included in the data query for each commodity. Data is from UN Comtrade, <https://comtrade.un.org/data/>.

However, even these numbers hide the true extent of forest-risk leather on the European market. While China is also a top market for Brazilian leather, much of it is re-exported to Europe as finished leather products, including shoes, bags, and clothes. In 2019, 13% of China’s leather imports were from the forest-risk countries Brazil and Paraguay. It can then be estimated that 13% of the \$2.3 billion of leather

goods entering the EU from China in that year, a value of \$279 million, also originated from a forest-risk country.⁷

Efforts to reduce market access for leather linked to deforestation would reduce Europe's deforestation footprint

Although just 9% of an animal's body weight,¹ leather is a high value product, and the value of the Brazilian leather industry is estimated at over \$50 billion. While there have been claims that leather is merely a by-product, many meatpackers operate on low profit margins, by-products can make up to 26% of large meatpackers' incomes¹⁵. Therefore, leather sales can determine whether or not they turn a profit or a loss, and if hides could not be sold, there would be a cost for their disposal. The vertical business structures of the largest meatpackers, such as JBS, also allow them to derive further value from the production and sale of leather by refining it in their own tanneries. Including leather within the scope of such a regulation would therefore have an outsized role in influencing the profitability of deforestation for cattle ranching.

Leather also plays a greater role as an export commodity for Brazil. 80% of leather is exported, compared to just 20% of beef.^{16,17} Leather's role as mainly an export commodity therefore presents a greater opportunity for importing countries to influence the sustainability landscape of cattle ranching.

Full leather traceability is within reach

Fortunately, determining the forest-risk of imported leather is relatively easy, compared to other forest-risk commodities. As tanneries produce leather of different grades, mechanisms to ensure quality control and prevent counterfeit products are often standard, although traceability may not extend beyond the meatpacking plant to the farm. At slaughter, hides can be physically stamped with an identifying code, which is present until processed into split grain leather or a finished good. The Leather Working Group certifies 23% of the world's "wet blue" hides¹⁸, and since 2009 has had a protocol which includes traceability to country, and for Brazilian hides, includes traceability to a meatpacker which monitors deforestation.¹⁹ Tracing from ranch to imported leather that is not linked to deforestation is feasible and could occur at low cost. As an example, in 2013, Gucci was able to produce a line of handbags made from leather traceable to Rainforest Alliance certified ranches.²⁰

Multiple initiatives are already in place to facilitate leather and beef traceability. The [Indirect Supplier Working Group \(GTFI\)](#) brings together stakeholders and develops guidance for Brazil's cattle industry to work towards traceability for all levels of suppliers, not just those who sell directly to meatpackers. The [Beef on Track](#) platform provides tools, data, and technical information for producers, meatpackers, retailers, and financial institutions to aid in deforestation-free beef and leather production and procurement. [Visipec](#) is a tool that meatpackers and retailers can use to monitor their suppliers and source deforestation-free beef and leather, using the best practice guidelines developed by GTFI. In combination, these tools and initiatives can be used in Brazil to ensure that leather placed on Europe market is not linked to deforestation.

In short, the import of the highest value cattle products, beef and leather, fits most objective assessments of priority commodities to be included in any policy aiming to reduce deforestation linked to imported commodities. Leather functions mainly as an export commodity, and therefore presents a unique opportunity for European markets, to minimise their contribution to deforestation, and support growing 'deforestation-free' initiatives in critical tropical forest biomes.

¹ PRODES Brasil. <http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes>

² UNFCCC. (2014). Report of the technical assessment of the proposed forest reference emission level of Brazil submitted in 2014. <https://unfccc.int/resource/docs/2014/tar/bra01.pdf>

³ Butler, R. (2017). Calculating deforestation figures for the Amazon. *Rio de Janeiro*. https://rainforests.mongabay.com/amazon/deforestation_calculations.html

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- ⁴ Loarie, S. R., Asner, G. P., & Field, C. B. (2009). Boosted carbon emissions from Amazon deforestation. *Geophysical Research Letters*, 36(14).
- ⁵ Zarin, D. J., Harris, N. L., Baccini, A., Aksenov, D., Hansen, M. C., Azevedo-Ramos, C., ... & Tyukavina, A. (2016). Can carbon emissions from tropical deforestation drop by 50% in 5 years?. *Global change biology*, 22(4), 1336-1347.
- ⁶ Bellassen, V., Crassous, R., Dietzsch, L., & Schwartzman, S. (2008). *Reducing emissions from deforestation and degradation: What contribution from carbon markets?*. https://ipam.org.br/wp-content/uploads/2008/04/reducing_emissions_from_deforestation_an.pdf
- ⁷ Global Canopy. (2021). Why nature matters at a climate conference. <https://globalcanopy.org/insights/explainer/why-nature-matters-at-a-climate-conference/>
- ⁸ Amigo, I. (2020). When will the Amazon hit a tipping point?. *Nature*, 578(7796), 505-508.
- ⁹ WWF. (2018). WHAT ARE THE BIGGEST DRIVERS OF TROPICAL DEFORESTATION? <https://www.worldwildlife.org/magazine/issues/summer-2018/articles/what-are-the-biggest-drivers-of-tropical-deforestation>
- ¹⁰ Mammadova, A., Masiero, M., & Pettenella, D. (2020). Embedded Deforestation: The Case Study of the Brazilian–Italian Bovine Leather Trade. *Forests*, 11(4), 472.
- ¹¹ CICB 2021. <https://cicb.org.br/cicb/dados-do-setor>
- ¹² UN Comtrade, <https://comtrade.un.org/data/>
- ¹³ Rainforest Foundation Norway. (2021). Driving deforestation: The European automotive industry's contribution to deforestation in Brazil. <https://bit.ly/2P50KaP>.
- ¹⁴ MacFarquhar C. (2021). Making the world's car seats: Czechia, leather, and deforestation risk. <https://globalcanopy.org/insights/insight/making-the-worlds-car-seats-czechia-leather-and-deforestation-risk/>.
- ¹⁵ Libera, C. Mirote, S & Horta, A. (2020). Brazil's Path to Sustainable Cattle Farming. <https://www.bain.com/insights/brazils-path-to-sustainable-cattle-farming/>
- ¹⁶ Brazilian Institute of Geography and Statistics (IBGE). Animal Slaughter Quarterly Survey. <https://www.ibge.gov.br/estatisticas/economicas/agricultura-e-pecuaria/9203-pesquisas-trimestrais-do-abate-de-animais.html?=&t=series-historicas>
- ¹⁷ Brazilian Beef Exporters Association (ABIEC). <http://abiec.com.br/en/>
- ¹⁸ Leather Working Group (2021). <https://www.leatherworkinggroup.com/join-us/facts-and-figures>
- ¹⁹ Leather Working Group (2021). <https://www.leatherworkinggroup.com/how-we-work/audit-protocols/leather-manufacturer-audit-protocol-7-0>
- ²⁰ Vogue Business 2019. Is footwear funding the burning of the Amazon?. <https://www.voguebusiness.com/companies/amazon-fires-footwear-leather-sustainability>; NWF Staff. (2013). Gucci Goes Green at Paris Fashion Week. <https://blog.nwf.org/2013/03/gucci-goes-green-at-paris-fashion-week/>; Vogue Italia (2013). https://www.vogue.it/en/shows/fashion-events/2013/03/gucci-and-green-carpet-challenge?refresh_ce=

Appendix A

List of HS codes included in the data of each commodity, and their descriptions. Descriptions are from UN Comtrade, <https://comtrade.un.org/data/>.

Leather	
HS Code	Description
410120	Raw hides and skins; whole, unsplit, of bovine or equine animals, of a weight per skin not exceeding 8kg when simply dried, 10kg when dry-salted or 16kg when fresh, wet-salted or otherwise preserved
410150	Hides and skins; raw, whole, of bovine or equine animals, of a weight per skin exceeding 16 kg
410190	Hides and skins; other than whole, but including butts, bends and bellies, of bovine (including buffalo) and equine animals, fresh, salted or preserved, but not tanned, parchment dressed or further prepared, whether or not dehaired or split
410411	Tanned or crust hides and skins; without hair on, bovine or equine, in the wet state (including wet blue), full grains, unsplit; grain splits
410441	Tanned or crust hides and skins; bovine or equine, without hair on, in the dry state (crust), full grains, unsplit; grain splits
410449	Tanned or crust hides and skins; bovine or equine, without hair on, in the dry state (crust), (other than full grains, unsplit; grain splits)
410711	Leather; further prepared after tanning or crusting, including parchment-dressed leather, of bovine (including buffalo) or equine animals, without hair on, other than leather of heading 41.14, whole hides and skins, full grain, unsplit
410712	Leather; further prepared after tanning or crusting, including parchment-dressed leather, of bovine (including buffalo) or equine animals, without hair on, other than leather of heading 41.14, whole hides and skins, grain splits
410419	Tanned or crust hides and skins; bovine or equine, without hair on, in the wet state (including wet blue), excluding full grains, unsplit; grain splits
410719	Leather; further prepared after tanning or crusting, including parchment-dressed, of bovine (including buffalo) or equine animals, without hair on, split or not, other than leather of heading 41.14, (other than grain splits and full grains, unsplit)
410791	Leather; further prepared after tanning or crusting, including parchment-dressed, of bovine (including buffalo) or equine animals, without hair on, other than leather of heading 41.14, not whole hides and skins, but including sides, full grain, unsplit
410792	Leather; further prepared after tanning or crusting, including parchment-dressed, of bovine (including buffalo) or equine animals, without hair on, other than leather of heading 41.14, not whole hides and skins, but including sides, grain splits
410799	Leather; further prepared after tanning or crusting, incl. parchment-dressed, of bovine (including buffalo) or equine animals, no hair, excluding leather of heading 41.14, and whole hides and skins, and sides, (full grains, unsplit and grain splits)
411410	Leather; chamois (including combination chamois)
411420	Leather; patent leather and laminated patent leather; metallised leather
411510	Leather; composition leather with a basis of leather or leather fibre, in slabs, sheets or strip, whether or not in rolls
411520	Leather; parings and other waste, of leather or composition leather; not suitable for the manufacture of leather articles; leather dust, powder and flour
420211	Cases and containers; trunks, suit-cases, vanity-cases, executive-cases, brief-cases, school satchels and similar containers, with outer surface of leather or of composition leather
420221	Cases and containers; handbags (whether or not with shoulder strap and including those without handle), with outer surface of leather or of composition leather
420231	Cases and containers; of a kind normally carried in the pocket or in the handbag, with outer surface of leather or of composition leather
420291	Cases and containers; n.e.c. in heading 4202, with outer surface of leather or of composition leather
420310	Apparel; articles of apparel, of leather or of composition leather
420321	Clothing accessories; gloves, mittens and mitts, specially designed for use in sports, of leather or composition leather, padded

420329	Clothing accessories; gloves, mittens and mitts, n.e.c. in heading no. 4203, of leather or composition leather, not specially designed for use in sports
420330	Clothing accessories; belts and bandoliers, of leather or of composition leather
420340	Clothing accessories; of leather or of composition leather, n.e.c. in heading no. 4203
420500	Leather articles; n.e.c. in chapter 42, of leather or composition leather
430219	Furskins; tanned or dressed, whole, with or without head, tail or paws, not assembled, n.e.c. in heading no. 4302, excluding goods or heading no. 4303
640312	Sports footwear; with outer soles of rubber, plastics, leather or composition leather and uppers of leather, ski-boots, snowboard boots and cross-country ski footwear
640319	Sports footwear; (other than ski-boots, snowboard boots or cross-country ski footwear), with outer soles of rubber, plastics, leather or composition leather and uppers of leather
640320	Footwear; with outer soles of leather, uppers consisting of leather straps across instep and around the big toe
640340	Footwear; with metal toe-cap, outer soles of rubber, plastics, leather or composition leather, uppers of leather
640351	Footwear; n.e.c. in heading no. 6403, with outer soles and uppers of leather, covering the ankle
640359	Footwear; n.e.c. in heading no. 6403, (not covering the ankle), outer soles and uppers of leather
640391	Footwear; n.e.c. in heading no. 6403, covering the ankle, outer soles of rubber, plastics or composition leather, uppers of leather
640399	Footwear; n.e.c. in heading no. 6403, (not covering the ankle), outer soles of rubber, plastics or composition leather, uppers of leather
640420	Footwear; outer soles of leather or composition leather, uppers of textile materials
640510	Footwear; with uppers of leather or composition leather, n.e.c. in chapter 64
Cocoa	
HS Code	Description
180100	Cocoa beans; whole or broken, raw or roasted
180200	Cocoa; shells, husks, skins and other cocoa waste
180310	Cocoa; paste, not defatted
180320	Cocoa; paste, wholly or partly defatted
180400	Cocoa; butter, fat and oil
180500	Cocoa; powder, not containing added sugar or other sweetening matter
180610	Cocoa; powder, containing added sugar or other sweetening matter
180620	Chocolate & other food preparations containing cocoa; in blocks, slabs or bars weighing more than 2kg or in liquid, paste, powder, granular or other bulk form in containers or immediate packings, content exceeding 2kg
180631	Chocolate and other food preparations containing cocoa; in blocks, slabs or bars, filled, weighing 2kg or less
180632	Chocolate and other food preparations containing cocoa; in blocks, slabs or bars, (not filled), weighing 2kg or less
180690	Chocolate and other food preparations containing cocoa; n.e.c. in chapter 18
Beef	
HS Code	Description
20110	Meat; of bovine animals, carcasses and half-carcasses, fresh or chilled
20120	Meat; of bovine animals, cuts with bone in (excluding carcasses and half-carcasses), fresh or chilled
20130	Meat; of bovine animals, boneless cuts, fresh or chilled
20210	Meat; of bovine animals, carcasses and half-carcasses, frozen
20220	Meat; of bovine animals, cuts with bone in (excluding carcasses and half-carcasses), frozen
20230	Meat; of bovine animals, boneless cuts, frozen
20610	Offal, edible; of bovine animals, fresh or chilled

20621	Offal, edible; of bovine animals, tongues, frozen
20622	Offal, edible; of bovine animals, livers, frozen
20629	Offal, edible; of bovine animals, (other than tongues and livers), frozen
21020	Meat; salted, in brine, dried or smoked, of bovine animals
160250	Meat preparations; of bovine animals, meat or meat offal, prepared or preserved (excluding livers and homogenised preparations)
Palm	
HS Code	Description
120710	Oil seeds; palm nuts and kernels, whether or not broken
151110	Vegetable oils; palm oil and its fractions, crude, not chemically modified
151190	Vegetable oils; palm oil and its fractions, other than crude, whether or not refined, but not chemically modified
151321	Vegetable oils; palm kernel or babassu oil and their fractions, crude, not chemically modified
151329	Vegetable oils; palm kernel or babassu oil and their fractions, other than crude, whether or not refined, but not chemically modified
230660	Oil-cake and other solid residues; whether or not ground or in the form of pellets, resulting from the extraction of palm nuts or kernels oils
Soy	
HS Code	Description
120110	Soya beans; seed, whether or not broken
120190	Soya beans; other than seed, whether or not broken
120810	Flours and meals; of soya beans
150710	Vegetable oils; soya-bean oil and its fractions, crude, whether or not degummed, not chemically modified
150790	Vegetable oils; soya-bean oil and its fractions, other than crude, whether or not refined, but not chemically modified
230400	Oil-cake and other solid residues; whether or not ground or in the form of pellets, resulting from the extraction of soya-bean oil