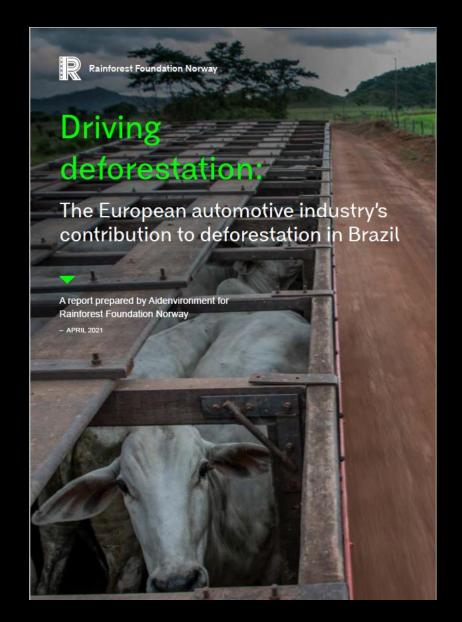




In April 2021, Rainforest Foundation Norway (RFN) published a research report on the European automotive industry's contribution to deforestation in Brazil. The report found that car seat manufacturing is a significant but often ignored economic driver. In November 2022, RFN published a scorecard with updated analysis of corporate zero-deforestation policies. This slide deck discusses the most relevant findings for institutional investors with zero-deforestation objectives.





#### Summary of key findings

High urgency: Cattle-driven deforestation has reached record highs in Brazil. Deforestation drivers are linked to the use of Brazilian leather in luxury car models in Europe.

Lack of meaningful action: The corporate policies of the automotive brands and their supply chain partners are insufficient to mitigate the risk of deforestation.

<u>Significant leverage:</u> The high market concentration of publicly traded car seat manufacturing creates significant investor leverage.

Risks and opportunities: Addressing supply chain deforestation allows car companies to anticipate upcoming regulations, whereas a lack of action can lead to high costs and material impacts on wider investment portfolios.

<u>Clear guidance for action:</u> The principles of the Accountability Framework are well designed for implementation by car companies and can form the basis for investor recommendations to investee companies.

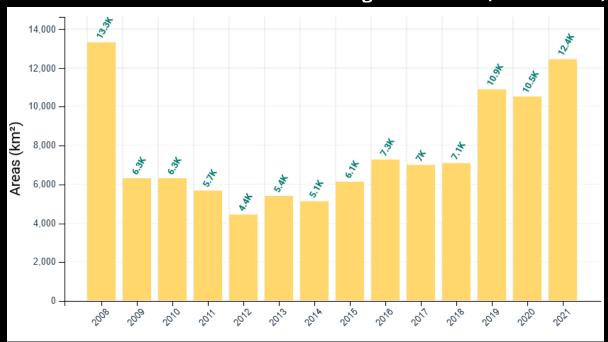


# The automotive industry has a substantial deforestation footprint

#### Cattle drives deforestation in the Brazilian Amazon

In 2021, the Amazon Biome saw the highest deforestation rates since 2008. The Amazon is now emitting more carbon than it absorbs and changing rainfall patterns impact agricultural productivity across Brazil. 80 percent of land conversion is for pasture used to raise cattle.

#### Annual deforestation rates in the Legal Amazon (2008-2021)

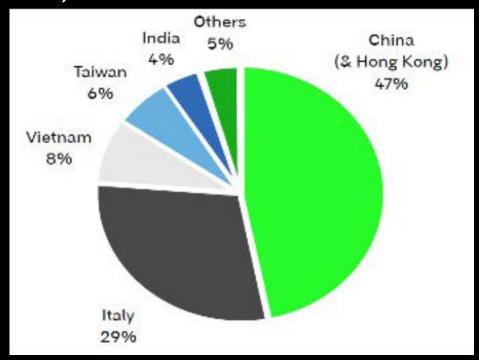


Source: INPE



# The automotive industry has a substantial deforestation footprint

Export destinations of semi-finished ("wet blue") leather from Brazil



Source: Aidenvironment

### Eighty percent of Brazilian leather is exported

Cattle produce both beef and leather. Most Brazilian beef is consumed domestically, but nearly 80 percent of Brazilian leather is exported. Key destination markets include China and Italy.



# The automotive industry has a substantial deforestation footprint

#### The automotive industry accounts for half of Brazil's leather exports

End user industries for Brazilian leather include the automotive, fashion and furniture sectors. The car industry accounts for half of Brazil's leather exports. All major car companies in Europe source from Brazilian leather and meatpacking firms that are linked to Amazon deforestation.

#### Identified links between car brands and Brazilian leather tanneries

EXPORTING TANNERIES DEFORESTATION EXPOSURE	JBS COUROS	VANCOUROS	FUGA COUROS	MINVERVA	MASTROTTO BRASIL
CAR MANUFACTURERS	1.15 mill ha	0.80 mill ha	0.47 mill ha	0.48 mill ha	Unknown
Volkswagen Group	•	*	*	*	*
BMW Group	*	**	*	*	
Damlier		•			
PSA Groupe	+			*	
Groupe Renault	•				

Source: Aidenvironment



# Deforestation remains largely unmitigated in automotive supply chains

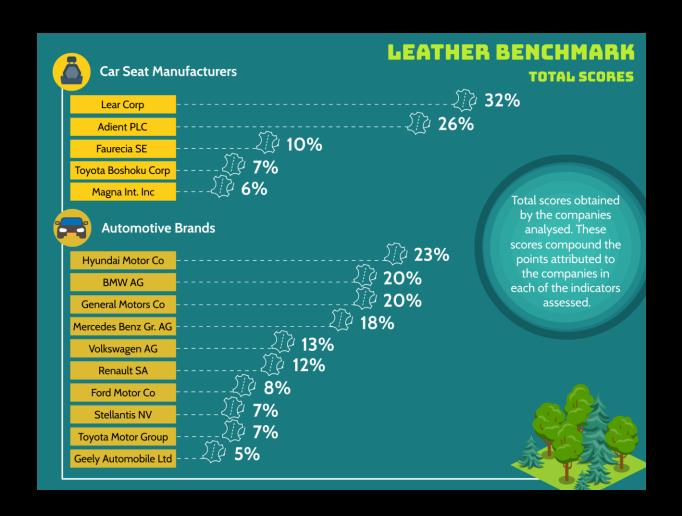
#### Deforestation is not recognized as a material ESG issue

The automotive industry has long and complex supply chains and faces various ESG challenges. Responsible sourcing policies of large car brands focus mostly on decarbonization and human rights. Deforestation risks of leather use is not recognized in most corporate sustainability policies.





# Deforestation remains largely unmitigated in automotive supply chains



# Zero-deforestation policies of car seat manufacturers fall short

Most companies in the automotive sector do not take measures to address leather-related deforestation. While some companies have recently adopted zero-deforestation measures, all fall short of best practices.

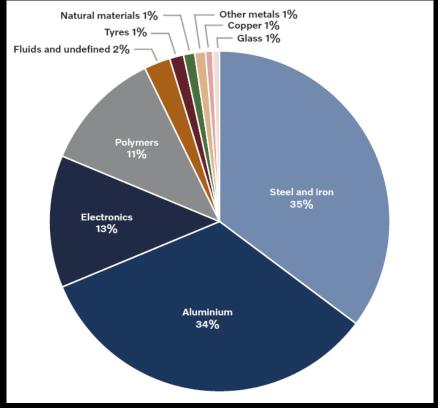


# Deforestation remains largely unmitigated in automotive supply chains

Automotive brands may be underestimating the carbon footprint of leather

Life Cycle Analyses of car models often assume that leather originates from low-risk geographies. Carbon emissions from land use change linked to high-risk leather is not included in calculations.

Example of a Life Cycle Analysis of the production and refining phase of an automobile



Source: Volvo



## Investors have leverage over car seat manufacturers



Source: Aidenvironment

#### The car seat market is highly concentrated

The ten largest car seat manufacturers jointly control over 90 percent of the global market. Large global players include Lear Corp, Adient, Toyota Boshoku, Magna and Faurecia. The high level of concentration gives these companies substantial market power and leverage over its supply chain.



### Investors have leverage over car seat manufacturers

### The five largest car seat manufacturers are publicly listed

Unlike many other midstream segments of forest-risk supply chains, the automotive seat sector has a high concentration of stock-listed actors. All of the five largest players are publicly traded with high free float percentages. These companies trade on US, EU and Japanese exchanges.



# Investors have leverage over car seat manufacturers

### Investors have initiated collaborate engagement efforts

Several investors have come together in the Investor Working Group for a Deforestation-Free Automotive Industry. This working group conducts collaborative engagement on deforestation risks stemming from the use of leather (for car seats) and rubber (for tires).

# Action now may prepare car companies for upcoming due diligence regulations

Companies in the automotive supply chain may be subject to burgeoning due diligence regulation

The European Commission has proposed new regulation to ban deforestation-linked products from the EU market. It puts due diligence requirements on companies that place forest-risk commodities, including leather, on the market.



# Action now may prepare car companies for upcoming due diligence regulations

Well-prepared companies may avoid highcost implementation challenges

Companies that anticipate changes in regulatory frameworks may avoid high implementation and compliance costs. Ultimately, well-prepared companies may also circumvent legal and litigation risks associated with non-compliance. Unless car companies and their supply chain partners improve their zero-deforestation approach, they may be forced to play an expensive game of catch-up.



# Action now may prepare car companies for upcoming due diligence regulations

#### Regulatory and other transition risks may affect shareholder value

The EU due diligence regulations are one example of a regulatory transition risk related to climate and deforestation. As the world responds to the growingly urgent climate and biodiversity crises, companies may be exposed to a range of deforestation-related transition risks that could materially impact shareholder value.



# Lack of action may create a leakage market and externalized costs may impact other industries

#### Leather may sustain a leakage market for unsustainable meatpackers

Leather is an essential part of the meatpacker value chain. A failure by actors in the automotive supply chain to set clear sourcing requirements will provide economic incentives for businessas-usual, despite requirements set by other industries.



#### Lack of action may create a leakage market and externalized costs may impact other industries

Externalized climate and biodiversity costs may harm Brazil's agriculture and global food systems

Academic studies have projected USD 200B of potential losses in agricultural productivity for Brazil's soy and livestock industries as a result of rainfall pattern changes caused by Amazon deforestation. Such impacts may spin off to global food systems that rely on Brazilian raw materials.

# Lack of action may create a leakage market and externalized costs may impact other industries

#### Universal asset owners may be vulnerable to financial risks from externalized impacts

Universal asset owners may see the externalized costs of leather-related deforestation internalized elsewhere in their investment portfolios. Any short-term profits in the car seat industry may be offset by longer term value loss of assets in agricultura and the global food sector.

Publicly commit to a time-bound zerodeforestation supply chain and adopt responsible sourcing policies

Companies should publicly commit to eliminate deforestation and the conversion of natural ecosystems in their supply chains, with a clear and ambitious deadline (ideally 2025 or before), cutoff dates and appropriate scope. These commitments should be embedded in responsible leather sourcing guidelines and procurement systems.



Map the leather supply chain beyond direct suppliers and provide transparency about the origin of leather products

Companies should map the corporate actors within their supply chains that originate from high forest-risk areas in Brazil. This includes meatpacking plants and Brazilian exporters. Traceability of hides should be extended to the breeding, rearing or fattening farms that directly and indirectly supply meatpackers and Brazilian tanneries.

Systematically assess deforestation and other sustainability risks in supply origins

Companies should monitor the risk of supplier non-compliance in a comprehensive and systematic manner. Best practice approaches include categorizing suppliers by risk profile (low, medium or high), applying generally accepted metrics, conducting independent monitoring, and adopting effective grievance mechanisms.



Engage direct and indirect suppliers that face high deforestation risks and/or are non-compliant with sourcing

When non-compliances are identified, companies should engage with their direct and indirect suppliers to address the issue. Should the non-compliant practices persist beyond a reasonable timeframe, the company may suspend and ultimately exclude specific suppliers. In specific instances, the scope of exclusion may be broadened from specific suppliers to entire high-risk geographies (e.g. the Brazilian Amazon and Cerrado Biomes).



Publicly disclose sufficient detail on deforestation risk management to CDP Forests or in corporate reporting

Companies should publicly disclose their commitments, policies and supplier expectations. They should disclose the volume of leather which they source and the states they source from. Companies should disclose the percentage of sourcing volume which is third-party certified, and the percentage of current supply which is traceable to tannery or farm level. companies should disclose their key suppliers and buyers, and also to report to CDP Forests. Companies should also publicly disclose a Grievance tracker.