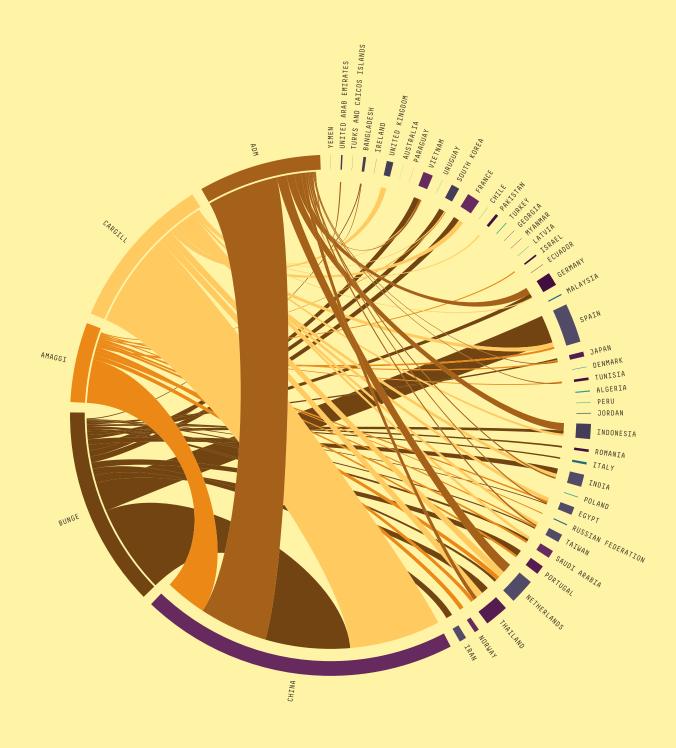
A vision for Trase: **2016–2020**



A vital challenge

Agricultural expansion to produce commodities we all use – such as soy, palm oil, timber, and beef – is driving some two thirds of tropical deforestation worldwide. This accelerates climate change and biodiversity loss, and is associated with a wide range of other social and environmental risks and impacts.

In response, leading governments, companies and investors have made ambitious sustainability commitments, including landmark pledges to achieve deforestation-free supply chains by 2020. But supply chain complexity and opacity remain one of the biggest barriers to achieving and monitoring these vital commitments.

Introducing Trase: Towards radical transparency for a deforestation-free economy

Trase is a powerful new sustainability platform that responds directly to this need, enabling governments, companies, investors and others to better understand and address the environmental and social impacts linked to their supply chains.

Trase is at the forefront of a data-driven revolution in supply chain sustainability, drawing on vast sets of production, trade and customs data, for the first time laying bare the flows of globally-traded commodities. Its pioneering approach provides wall-to-wall coverage of the export routes and buyers responsible for all production, and the associated risks, of a given commodity.

Over the next 5 years, Trase aims to map the trade and risks for over 70% of total production in major forest risk commodities, catalyzing a transformation in supply chain sustainability for agricultural drivers of deforestation.

Trase seeks to offer a step-change in understanding of how companies, governments, investors, and consumers around the world have a shared stake in reversing the unsustainable practices associated with many of the world's major agricultural commodities. This change can accelerate progress towards sustainability along every stage of a supply chain, including by:

- Driving down the costs of sustainable production practices by helping align the efforts of multiple downstream actors who share a connection to the same production landscapes
- Underpinning a systematic approach to assessing performance and progress across entire sectors and countries. Trase can help identify and reward the efforts of market leaders and enable a more effective response to impacts where they do occur
- Unlocking the potential of sustainability researchers and practitioners by integrating with other platforms and providing a go-to place for supply chain sustainability information

What will Trase deliver?

The vision of Trase will be delivered through work on three inter-related fronts:

1. Connecting actors to places

Trase central innovation is the ability to map supply chain actors to all the landscapes where a given commodity is produced. Unlike bespoke traceability systems that are designed to track the supply chain of a given company by taking a territorial approach and mapping the total production for a given commodity over a given period – for example the total export of Brazilian soy in 2015, from specific municipalities of production to consumers worldwide, via the exporters, ports, shippers and importers that make up the supply chain



Exports of soy produced in Brazil's six biomes by major traders in 2015

In doing so, Trase offers a novel entry point for simplifying the complexity of global supply chains. This approach also provides a solid foundation for building out more complexity as needed, including tracking back to specific producers and mapping further downstream to specific consumers in both international and domestic markets.

2. Linking actors to sustainability impacts and risks

Together with unprecedented supply chain traceability, Trase provides a database of geospatial information on the sustainability impacts and risks associated with different regions of production – including deforestation, GHG emissions, biodiversity impacts, workers' conditions and human rights. Trase links these data to different downstream actors, providing decision–relevant summaries on the risks and opportunities that they face











AREA FARM GDP SOY LAND 17786.2km² 50% 68.4%

KEY SUSTAINABILITY INDICATORS	SCORE	STATE RANKING
Deforestation	18.4 ha	13
Soy Production	3.18 Tn	27
Water scarcity	2/7	4
Burned Area	29.5 km ²	51
Conflicts	0	70
Fines & Embargos	2	6
HDI	0.792	30

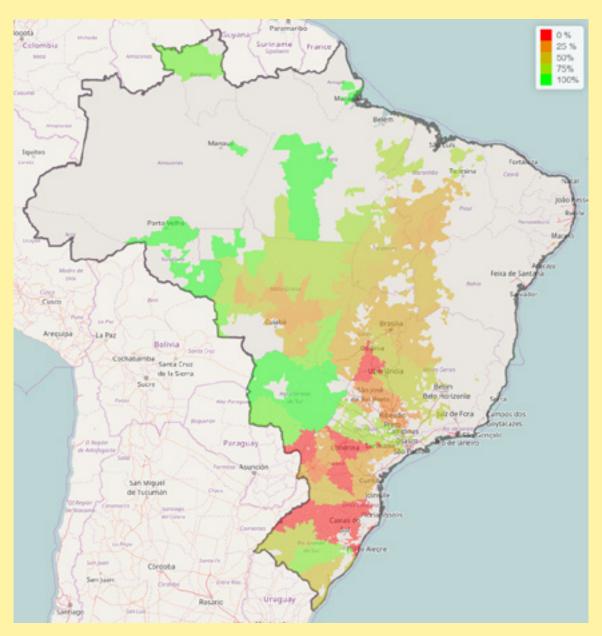
TOP 10 EXPORTERS	TONES
1. BUNGE	176400
2. AMAGGI	101300
3. CARGILL	79200
4. CHS	65100
5. MITSUBISHI CORPORATION	43000
6. SELECTA	24900
7. ADM	22100
8. NIDERA	11800
9. CGG TRADING	10000
10.SYNAGRO COMERCIAL AGRICOLA	9900

Sustainability information for the municipality of Querencia in Brazil, 2015.

Contextual information on companies and geographies of production, including corporate and governmental sustainability commitments, sectoral market share, and performance measures, allow for a richer understanding of the actors that shape commodity supply chains.

3. Measuring and monitoring performance

The blanket transparency provided by Trase greatly advances our ability to monitor the performance of companies and governments that have committed to improve the sustainability of supply chains.



Proportion of Brazilian soy that was exported in 2015 from individual municipalities by traders with a zero deforestation commitment. Includes all signatories to the Soy Moratorium in the Brazilian Amazon as well as companies with blanket zero deforestation commitments.

Starting in 2017, Trase will work with partners to provide an annual sustainability performance assessment of both the places and actors that drive the production and trade in major forest-risk commodities, helping to identify areas of concern, critically evaluate program and policy effectiveness and comprehensively assess progress towards 2020 commitments and beyond.

Who is Trase for?

Trase is an open access platform. In revealing the sustainability risks and opportunities that connect production landscapes with consumers worldwide, the platform can help actors at every step of the supply chain make smarter decisions.

In its first two years, Trase will focus on expanding these core capabilities to develop more tailored analytics and insights for four main user groups:

Commodity traders striving to meet sustainability commitments and to de-risk their supply chains. The platform provides the data and tools to monitor company progress, demonstrate their sustainability credentials to consumers and business partners, identify other actors along their supply chains to cooperate with, and plan more sustainable sourcing strategies

Producer country governments who want to promote sustainable production, reduce poverty, build effective partnerships with companies down the supply chain, and monitor the activities of producers and exporters across different jurisdictions.

Consumer country governments who want to understand and manage their countries' socio-environmental impacts abroad, make sustainable procurement decisions and meet commitments such as the EU's Amsterdam Declarations on sustainable palm oil.

Banks & investors: Trase offers an engagement tool to lenders and investors exposed to producers, trade finance, and buying companies using forest risk commodities, through which to raise awareness and accelerate adoption of best practice.

Civil society organizations and multi-stakeholder processes committed to providing independent monitoring and assessment of private- and public-sector actors involved in the trade of globally significant commodities, including those that have made individual or collective commitments such as under the New York Declaration on Forests.

In addition, Trase will build from this initial focus to support use by other stakeholders including manufacturers and retailers as well as consumer groups committed to more sustainable consumption, and journalists and campaigning groups who play a vital watchdog role in strengthening the accountability of global supply chains.

Expanding the relevance of Trase will be achieved by providing tailored analytics, as well as expanding the mapping of commodity flows beyond the port of import in consumer countries and mapping the flows of investment into these supply chains.

As an open-access and independent resource Trase is also being designed to integrate with other platforms that provide complementary information on everything from regional economic benefits of agricultural production, illegal deforestation, forest fires and workers' rights to the commitments and performance of key actors in a supply chain.

From the outset, Trase will also support the sustainability science community in accessing and using its data, helping to further catalyse the delivery of decision-relevant analytics for other users and inspire thought leadership and innovations in research.

What commodities will Trase include?

The platform is currently focused on the supply chains of agricultural commodities associated with deforestation risk and their impacts on land and water use, biodiversity, greenhouse gas emissions and rural development.

From 2017, Trase will focus on expanding to include all Latin American soy, followed by beef in Argentina, Brazil and Paraguay, and on to other major commodities including Brazilian timber and Indonesian oil palm. Further commodities and countries will be brought online on a rolling basis, with the implementation of different levels of detail in supply chain mapping dependent on funding and data availability.

How does Trase map supply chains?

The supply chain mapping in Trase relies on several key sources of data for each commodity and country of production, synthesized by researchers at the Stockholm Environment Institute to produce the SEI-PCS approach (Spatially-Explicit Information of Producer to Consumer Systems). To trace exports back to production landscapes, the approach uses millions of data points collected from subnational and national governments, publicly available and self-declared logistics data, and official global trade data.

Key data sets include:

- Official national customs declarations
- Bills of ladings (legal contract and cargo receipt between trading partners,)
- Self-declarations by exporters on their supply chain logistics
- Storage facilities
- Processing facilities
- Subnational taxation data for shipped good gathered at the port level
- UN Food and Agricultural Organization trade data to account for re-exports between countries

The mapping of supply chains is data-driven, using an advanced decision-tree approach to link and triangulate datasets pertaining to a given shipment. In the instances where triangulation does not provide with a definitive unique solution, modelling is used to estimate sub-national allocations and in allocating production from logistical hubs, such as storage silos, to municipalities. Data on individual material flows are aggregated by (i) product (e.g. combining soy beans with soy cake and soy oil), (ii) year, (iii) parent company, (iv) port of export, (v) source municipality and (vi) destination country.

The Trase partnership

Trase is a partnership between the Stockholm Environment Institute and the Global Canopy Programme. We work closely with Vizzuality, the European Forest Institute, and many other partners.

These include Agrosatelite, Both ENDS, BV Rio, CDP, Chalmers University, Conservation International, Gibbs Land Use and Environment Laboratory at Wisconsin University, International Institute for Sustainability, Imaflora, InfoAmazonia, León University, Louvain University, Luc Hoffman Institute, The Nature Conservancy, Transitions, University of Brasilia, University of Bonn, University of Sao Paulo, World Conservation Monitoring Centre, World Resources Institute, and WWF.

We are actively seeking to build relationships with new partner institutions and funders to further the development and applications of the platform to include new countries, commodities, capabilities and data, and to identify concrete opportunities for mainstreaming Trase outputs.

Trase is an open-access platform that is compatible with, and can help unlock potential from, other initiatives working on the sustainability of agricultural production systems and international trade.

Work on Trase has helped establish the Supply Chain Transparency Network, a learning and knowledge exchange community of practitioner organizations working on transparency for supply chain sustainability.

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