



**Company Action
in Collective Efforts
for Sustainable Land Use at Scale**

This report summarizes findings and recommendations from a 15-month study that the Tropical Forest Alliance (TFA) initiated in 2022 to advance understanding of the use of landscape and jurisdictional approaches as a key corporate strategy for downstream and midstream companies to achieve sustainable sourcing and have positive impacts in the regions they are sourcing from. Findings from this study are expected to be a key resource to map the way forward to mobilize more private sector action and multi-stakeholder collaboration at scale in production landscapes. See [Annex 1](#) for more details.

This study, part of TFA's support for the [Jurisdictional Action Network](#), was developed with generous support from Cargill and the governments of Norway, the UK and the Netherlands. The reports are available on the [Jurisdictional Approaches Resource Hub](#).

Authors: Leony Aurora, Dyah Puspitaloka, and Jack Lloyd

Copy editor: Katherine Demopoulos

Design and layout: Chantelle de Lange of Adhesive Designs

We would like to thank Proforest and CDP for their collaboration across the study and the six publications that precede and inform this final report. We are grateful for the inputs to the draft findings and recommendations of this final report from 20+ companies and organizations that TFA consulted with, as well as reviews of the draft report and inputs provided by Norma Mercedes Pedroza Arceo and Claire Prescott of CDP, Debora Dias of the Consumer Goods Forum, Matthew Spencer of IDH, Patrick Mallet of ISEAL, Ristika Putri of the Secretariat of Indonesia's Sustainable Districts Association LTKL, Joko Arif of the David and Lucile Packard Foundation, and Rachel Wall and Veronique Bovee of Proforest. We also appreciate the valuable data and insights received from representatives of other companies, industry platforms and implementers of landscape initiatives interviewed and corresponded with for this study.

Citation: Tropical Forest Alliance, *Company Action in Collective Efforts for Sustainable Land Use at Scale*, October 2023

Reproduction of the text for educational or non-commercial use is authorized without prior permission, provided that proper citation is made, and that material is used accurately and not in a misleading context. This does not represent a licence to repackage or resell any of the data reported to CDP and presented in this report.

Disclaimer: Although every effort has been made to ensure that the content of this report is up to date and accurate, errors and omissions may occur. The report is provided on an "as is" basis and is not intended as a substitute for the reader's own due diligence and inquiry.

Cover: © Icaro Cooke Vieira/CIFOR

AFTER READING THIS REPORT

FROM A STUDY WHERE WE FIND

<p>113 Companies* taking landscape-scale action</p>	<p>91 Landscape and jurisdictional initiatives supported by companies</p>
--	--

* Downstream, midstream and integrated companies that have taken landscape-scale action in cocoa, palm oil, pulp and paper, beef and soy production areas.

WE HOPE

- **Downstream and midstream companies** see the opportunities and emerging business case for assisting the transformation to sustainable commodity production and land use on the ground through multi-stakeholder collaboration at landscape and jurisdictional scale;
- **Entities guiding companies** in making decisions on their sustainability actions, including governments, NGOs, service providers and donors, understand how companies are collaborating with stakeholders to address sustainability challenges at scale and are inclined to leverage, incentivize and/or contribute to these landscape-scale efforts; and
- **Conveners and implementers** of landscape and jurisdictional initiatives have a better understanding on how to engage and convince downstream and midstream companies to collaborate and take action on the ground.

WHAT ARE YOU INTERESTED IN?

What are landscapes and jurisdictional approaches	SECTION 1.3	
Why companies take landscape-scale action	SECTION 2.3	
Examples of landscape-scale action taken by companies	SECTION 2.4	
Opportunities to accelerate progress at landscape and jurisdictional scale	SECTION 3.3	
The business case for companies to collaborate with stakeholders on the ground	SECTION 4.2	
Recommendations for companies and the wider community	SECTION 4.3	

TABLE OF CONTENTS

1. INTRODUCTION AND CONTEXT

1.1	Commodity Production: Opportunities and Challenges	7
1.2	Efforts to Achieve Sustainable Commodity Production	8
1.3	Landscape and Jurisdictional Approaches: What and Why	9

2. COMPANY COLLABORATIONS WITH STAKEHOLDERS IN PRODUCTION LANDSCAPES

2.1	The Beginning of a Promising Journey	12
2.2	Companies Building Momentum for Landscape-Scale Action	15
2.3	Why Companies Take Landscape-Scale Action	19
2.4	How Companies Take Action for Sustainability at Landscape Scale	20
2.5	Tools Facilitating Companies to Take Landscape-Scale Action	23

3. BUILDING MOMENTUM AND ACCELERATING PROGRESS AT SCALE

3.1	Landscape-Scale Action to Assist Companies to Meet Policy and Regulatory Compliance	26
3.2	Companies' Landscape-Scale Action for Nature, Climate and People Goals	30
3.3	Scaling Up Action and Accelerating Progress for Sustainable Land Use at Scale	33

4. CONCLUSIONS AND RECOMMENDATIONS

4.1	While Momentum is Building, Collaboration with Stakeholders in Production Landscapes is Yet to Become a Mainstream Corporate Strategy	37
4.2	While Value of Collaborating with Stakeholders is Clear, the Business Case for Companies Needs to be Strengthened	38
4.3	Recommendations for Companies and Wider Community	40

FIGURES

1	Defining Landscape and Jurisdictional Approaches (LJA)	10
2	Factors Affecting Landscape and Jurisdictional Performance	11
3	Selected Milestones of Company Use of LJAs for Sustainable Commodity Production	12
4	LJAs Supported by Downstream and Midstream Companies	13
5	LJAs Supported by Downstream and Midstream Companies	18
6	Selected Milestones in Climate and Nature Efforts and Financing for Transformation to Sustainable Production	25
7	Regulations and Policies Influencing Commodity Production and Trade in Selected Countries	27
8	Issues Addressed by Target-Setting, Accounting And Reporting Frameworks	31
9	The Business Case for Companies to Take Landscape-Scale Action	38

BOXES

1	Corporate Landscape-Scale Action in Numbers	15
2	Key Factors Influencing Where Companies Take Landscape-Scale Action	20
3	Opportunities Provided by Regulations and Policies	26
4	What LJA Offer Companies	30
5	Siak: An Example of Multi-Stakeholder Efforts	35
6	How Much is Enough for Companies' Landscape-Scale Action?	39

ANNEX

	Study Objectives and Methodology	42
--	----------------------------------	----

	REFERENCES	43
--	------------	----

ABBREVIATIONS AND ACRONYMS

AFI

Accountability Framework initiative

ASD

Action for Sustainable Derivatives

BVCM

Beyond value chain mitigation

CGF FPCOA

The Consumer Goods Forum Forest Positive Coalition of Action

CLUA

Climate and Land Use Alliance

COP

Conference of Parties

CSO

Civil society organization

DCF

Deforestation and conversion free

EU

European Union

EUDR

European Union Deforestation Regulation

FLAG

Forest, land and agriculture

GCF TF

Governors' Climate and Forests Taskforce

GDP

Gross domestic product

GHG

Greenhouse gas

ha

Hectare

HCV

High conservation value

IFACC

Innovative Finance for the Amazon, Cerrado and Chaco

ISPO

Indonesian Sustainable Palm Oil

LEAF COALITION

Lowering Emissions by Accelerating Forest Finance Coalition

LJA

Landscape and jurisdictional approaches

LJI

Landscape or jurisdictional initiative

LTKL

Lingkar Temu Kabupaten Lestari (Indonesia's Sustainable District Association)

NDC

Nationally determined contribution

NGO

Non-governmental organization

PCI

Produce, Conserve and Include

REDD+

Reducing Emissions from Deforestation and Forest Degradation

RSPO

Roundtable on Sustainable Palm Oil

SBTI

Science Based Targets initiative

SBTN

Science Based Targets Network

SCF

Soft Commodities Forum

TFA

Tropical Forest Alliance

TNFD

Taskforce for Nature-related Financial Disclosures

TLFF

Tropical Landscape Finance Facility

UK

United Kingdom

UNFCCC

United Nations Framework Convention on Climate Change

WCF

World Cocoa Foundation

WRI

World Resources Institute

WWF

World Wide Fund for Nature



FOREWORD

JACK HURD, EXECUTIVE DIRECTOR OF THE TROPICAL FOREST ALLIANCE

The science is clear: if we are to limit the global temperature increase to 1.5° Celsius and address the nature crisis, we must halt deforestation and ecosystem conversion driven by the production of the commodities we use in our food, toiletries, and biofuels. To do this at scale, while supporting local communities to thrive, we need all stakeholders to work together.

This study aims to advance understanding of why and how downstream and midstream companies have collaborated with stakeholders in their sourcing region to create systemic and lasting change at scale. We identified 113 downstream and midstream companies that have already taken landscape-scale action to date. Momentum is building rapidly, and this report details the opportunities to accelerate progress in this promising journey and provide companies with a clear and evidenced business case to increase their contribution to multi-stakeholder efforts in production landscapes.

We hope the report provides insights to downstream and midstream companies on the opportunities open to them, helps government, NGOs and service providers to incentivize companies to

continue collaborating with stakeholders in production landscapes and demonstrates to convenors and implementers how to engage companies and invite them to collaborate.

The report notes that progress to achieve the outcome of a thriving and sustainable landscape that meets the needs of local and global communities can be accelerated by focusing efforts and resources in committed and progressing regions. While the wider community supporting sustainable commodity production should provide the tools and mechanisms to incentivize companies to take landscape-scale action, companies should also continue and even increase their efforts to help production landscapes transition towards a nature-, climate- and people-positive future.

The groundswell in support for landscape and jurisdictional efforts promises a very real transition to sustainable commodity production at scale through multi-stakeholder collaboration. By working together with government, civil society, implementers and facilitators, the private sector can contribute to systemic and sustained change for people and planet.

“

MOMENTUM IS BUILDING RAPIDLY AND THERE ARE A LOT OF OPPORTUNITIES TO ACCELERATE PROGRESS IN THIS PROMISING JOURNEY TO CREATE CHANGE AT SCALE IN COMMODITY PRODUCTION LANDSCAPES.



FOREWORD

WAI-CHAN CHAN, MANAGING DIRECTOR OF THE CONSUMER GOODS FORUM

This report, *Company Action in Collective Efforts for Sustainable Land Use at Scale*, showcases the enthusiasm of downstream and midstream companies to collaborate with stakeholders in production landscapes. Increasingly, companies are interested in engaging outside of their immediate supply chain to help create systemic and sustained change within their sourcing regions, learning from others' experience where individual supply chain action is not sufficient to tackle sustainability challenges such as deforestation.

Various stakeholders play a crucial role in creating resilient production landscapes where communities thrive while forests and other natural ecosystems are preserved. It is through conversations and collaborations between stakeholders that the systemic change we seek can be achieved and sustained.

At The Consumer Goods Forum and the Forest Positive Coalition of Action, in particular, we strive to create greater change than what would have been possible by any one entity alone - identifying

shared challenges and solutions, exchanging learning and helping to define good practice. Examples of action taken by stakeholders across palm oil, pulp and paper, beef and soy landscapes highlighted in this report point to the success we can achieve through collective action. We hope that these will inspire others to join such initiatives, so that we can continue this journey together.

All of us should actively promote collaboration with stakeholders in production landscapes, both as corporate best practice to address sustainability challenges and to build a critical mass of initiatives that will allow it to become the norm.

Importantly, we should also build the capacity on the ground to support the sustained change that is led by the local stakeholders. I urge all companies to take advantage of the existing opportunities and forge partnerships to engage in landscape and jurisdictional action in their sourcing regions, building on this momentum to achieve nature-, climate- and people-positive outcomes at scale.



ALL OF US SHOULD ACTIVELY PROMOTE COLLABORATION WITH STAKEHOLDERS IN PRODUCTION LANDSCAPES, BOTH AS CORPORATE BEST PRACTICE TO ADDRESS SUSTAINABILITY CHALLENGES AND TO BUILD A CRITICAL MASS OF INITIATIVES THAT WILL ALLOW IT TO BECOME THE NORM.



1. INTRODUCTION AND CONTEXT

1.1 COMMODITY PRODUCTION: OPPORTUNITIES AND CHALLENGES

Beyond meeting global supply and demand, the production of agricultural commodities plays a critical role in driving economic growth, enhancing local livelihoods and ensuring food security. Agricultural commodity production contributes a significant portion of GDP in developing countries: close to 20% in Ghana in 2021, 13% for Indonesia and 7% in Brazil (Our World in Data n.d.). Agricultural sectors provide livelihoods for 2.5 billion people worldwide and are the largest source of income and jobs in developing countries, critical for alleviating poverty (Convention on Biological Diversity 2018).

Consumption of food produced by agricultural sectors is expected to increase by 51% by 2050 (Convention on Biological Diversity 2018, World Bank 2023). To feed the expected 10 billion people by 2050 sustainably and responsibly, agricultural production needs to increase without expanding cultivated land area and not at the expense of degrading natural ecosystems, while taking efforts to reduce emissions (Ranganathan et al. 2018).

Agricultural activities have been identified as key drivers of deforestation (WRI n.d.). According to a World Resources Institute study, production of key

commodities such as soy, oil palm, beef, cocoa, coffee, rubber and wood have replaced 71.9 million hectares (ha) of forests – twice the area of Germany – and accounting for more than a quarter of global tree cover loss between 2001 and 2015 (Weisse and Goldman 2021).

Although declining, commodity-driven deforestation, both from commercial and subsistence-scale production, remains a prominent challenge (Andoh et al. 2022) and continues to put pressure on tropical forests (FAO 2022) and other biomes.

Cocoa is associated with 13% of forest loss between 2000 and 2020 in protected areas in Ghana (Kalischek et al. 2023), the world's second-largest producer and exporter of the commodity (ICCO 2022; OEC 2022). In Brazil, soy and cattle production are among the primary drivers of deforestation in the Cerrado, a tropical savannah biome, with 734,010 ha of converted area between 2019 and 2020 (Chain Reaction Research 2021). In Indonesia, between 2001 and 2021, 3 million ha of forest were lost, including 630,000 ha of carbon-rich peatland, for timber plantations to supply the pulp and paper industry (Nusantara Atlas 2023).

The sustainability challenges in the production of agricultural commodities are multifaceted. The inclusion of the millions of smallholders producing commodities like palm oil and cocoa in sustainable supply chains remains a significant challenge due to systemic issues such as a lack of land tenure security, accountability of intermediary traders, and limited

“

BETWEEN 2001 AND 2015, PRODUCTION OF KEY COMMODITIES SUCH AS SOY, OIL PALM, BEEF, COCOA, COFFEE, RUBBER AND WOOD REPLACED FORESTS EQUIVALENT TO TWICE THE SIZE OF GERMANY

access to technology (Fauzi 2022). Challenges are also found in ensuring that the rights of Indigenous Peoples and local communities are respected, for example in the expansion of cattle and soy production in Brazil (Mano 2019; Chain Reaction Research 2022). Pulp and paper production have caused landscape degradation, biodiversity loss and soil

erosion, among other impacts, for example in Brazil and Chile (Guerino et al. 2022; Salas et al. 2016; Heilmayr et al. 2016).

Other challenges in commodity production include declining water quality, observed in cocoa-producing landscapes in Colombia (TFA et al. 2023a).

1.2 EFFORTS TO ACHIEVE SUSTAINABLE COMMODITY PRODUCTION

Many actors – companies, governments and civil society – have developed tools and taken action to address the negative environmental and social impacts of commodity production. The use of voluntary sustainability standards and certification schemes dates back to the 1980s and 1990s as concerns grew surrounding deforestation in tropical forests (Tuppura et al. 2015). Certification has become one of the main ways to ensure sustainable production practices (ISEAL 2019). In the palm oil sector, the Roundtable on Sustainable Palm Oil (RSPO), Rainforest Alliance and organic certification combined covered 3.3 million ha, or 11.6% of the global production area, in 2020.

In the same year, Fairtrade International, organic, Rainforest Alliance and UTZ certified at least 2.6 million ha of cocoa plantations altogether, or 21.4% of the global area, while the Forest Stewardship Council and the Programme for the Endorsement of Forest Certification combined certified 451 million ha of forests, or 11.3% of the global area (International Trade Centre 2022).

Another voluntary mechanism is companies' own sustainability commitments. In 2010, the Board of the Consumer Goods Forum (CGF) committed to help achieve zero net deforestation by 2020 in key commodities, namely soy, palm oil, pulp and paper, and beef (CGF 2010). This pledge was reconfirmed when companies signed the New York Declaration of Forests in 2014 – the current endorsers are 64 companies (NYDF n.d.; NYDF 2014). By 2022, more than 500 companies had made zero deforestation commitments (Bager and Lambin 2022).

Companies face similar challenges in meeting their sustainability commitments, hence pre-competitive coalitions with peers and other stakeholders were formed to accelerate progress in tackling these. Company-led coalitions that have supported members to collaborate with stakeholders in production landscapes include [the World Cocoa Foundation](#) (WCF), [the CGF Forest Positive Coalition of Action](#) (CGF FPCoA), [Action for Sustainable Derivatives](#) (ASD), [the Palm Oil Collaboration Group](#) and [the Soft Commodities Forum](#) (SCF).

Government regulations, policies and programmes continue to be the cornerstone of coordinated efforts to attain sustainable commodity production. Indonesia, the world's largest palm oil producer, enacted a moratorium on palm oil expansion from 2018 to 2021, during which time the government also reviewed existing palm oil licences in an effort

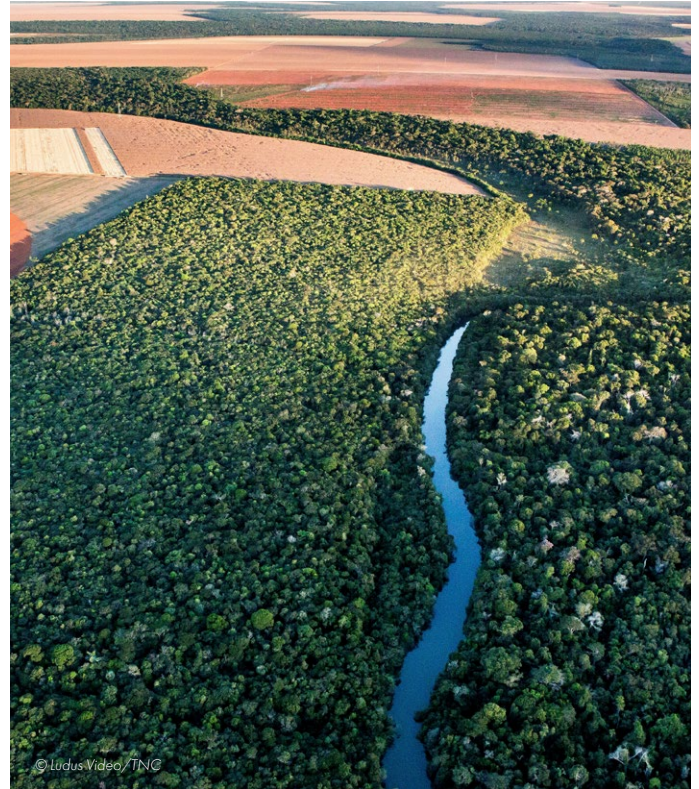


to improve governance (Suroyo and Christina 2021). Indonesia also issued its National Action Plan on Sustainable Palm Oil in 2019 (President of Indonesia 2019b), the implementation of which resulted in the creation of several multi-stakeholder platforms at district, provincial and national levels.

Brazil has shown its commitment to sustainable production through a soy moratorium that bans the trading of soy produced on land deforested after 2008 (Jordan et al. 2022; Rausch 2021) and through the implementation of the Forest Code, which makes it mandatory for farmers to keep forests and natural ecosystems standing in portions of their farms in the Amazon and Cerrado (De Siqueira et al. 2017; Azevedo et al. 2016).

Ghana established a national strategy to reduce emissions from deforestation and degradation (REDD+), including in cocoa producing regions. On the demand side, the most recent and most discussed regulations include the European Union Deforestation Regulation (EUDR), which requires commodities including cocoa, palm oil, pulp and paper, soy and beef entering the market to be free from deforestation, with a cut-off date of 31 December 2020. (European Commission n.d. c).

See [Chapter 3](#) for other examples of regulations and how companies' collaboration with stakeholders in production landscapes will help them to meet the regulations of producer and consumer countries and to benefit from supporting policies.



1.3 LANDSCAPE AND JURISDICTIONAL APPROACHES: WHAT AND WHY

The “landscape approach” as a term gained popularity in the 1980s, fuelled by debates on, among others, nature conservation as aspired by the Global North and the potential trade-offs with livelihood needs of the Global South (Arts et al. 2017).

Landscape approaches focus on the collaboration of stakeholders within defined natural, social or administrative boundaries to achieve shared goals that reconcile social, economic and environmental interests (Reed et al. 2016; Arts et al. 2017; TFA et al. 2020). Such approaches gained importance

with the increasing acceptance that sectorial and project-based approaches were insufficient to meet global goals to reduce deforestation and emissions, secure food production and improve livelihoods (Nepstad et al. 2013; Reed et al. 2015).

The jurisdictional approach (JA) is a type of integrated landscape management within subnational or national administrative boundaries and with active involvement of government (Stickler et al. 2018; TFA et al. 2020).

This approach recognizes the irreplaceable role of government in land-use planning and law enforcement and the need for land-use governance across a defined territory to facilitate forest protection and emissions reduction at scale (Seymour 2017; Boyd et al. 2018). Particularly in large countries, their expansive area and heterogeneity – Indonesia’s land mass is one-fifth that of the EU while Brazil’s

“

LANDSCAPE APPROACHES FOCUS ON THE COLLABORATION OF STAKEHOLDERS WITHIN DEFINED NATURAL, SOCIAL OR ADMINISTRATIVE BOUNDARIES TO ACHIEVE SHARED GOALS

is four-fifths (Comparea n.d.) – could pose challenges in policy implementation (Boyd et al. 2018). Subnational governments are closer to realities on the ground – to the farmers and communities that benefit from and are affected by land-use policies.

States, provinces, districts and/or municipalities in many countries have substantial power to shape land-use decisions and often hold a significant amount of responsibility for land-use governance (Stickler et al. 2014).

FIGURE 1 **DEFINING LANDSCAPE AND JURISDICTIONAL APPROACHES (LJA)**



* While LJA can help address multiple objectives, this report focuses on their use to achieve sustainable and resilient commodity production as a critical part of sustainable land use in producing regions.
 Source: Authors

Meaningful participation and long-term collaboration among different stakeholder groups are recognized as key success factors in the implementation of landscape and jurisdictional approaches (LJA) (Landscape for People, Food and Nature, n.d.; Fishman et al. 2017, TFA et al. 2020).

Effective participation from “all affected segments of society” is critical (Fishman et al. 2017). In recent guidance, companies are recommended to ensure that stakeholders “whose human rights may be put at risk due to business activities” are engaged (TNFD 2023c; Murasa 2023).

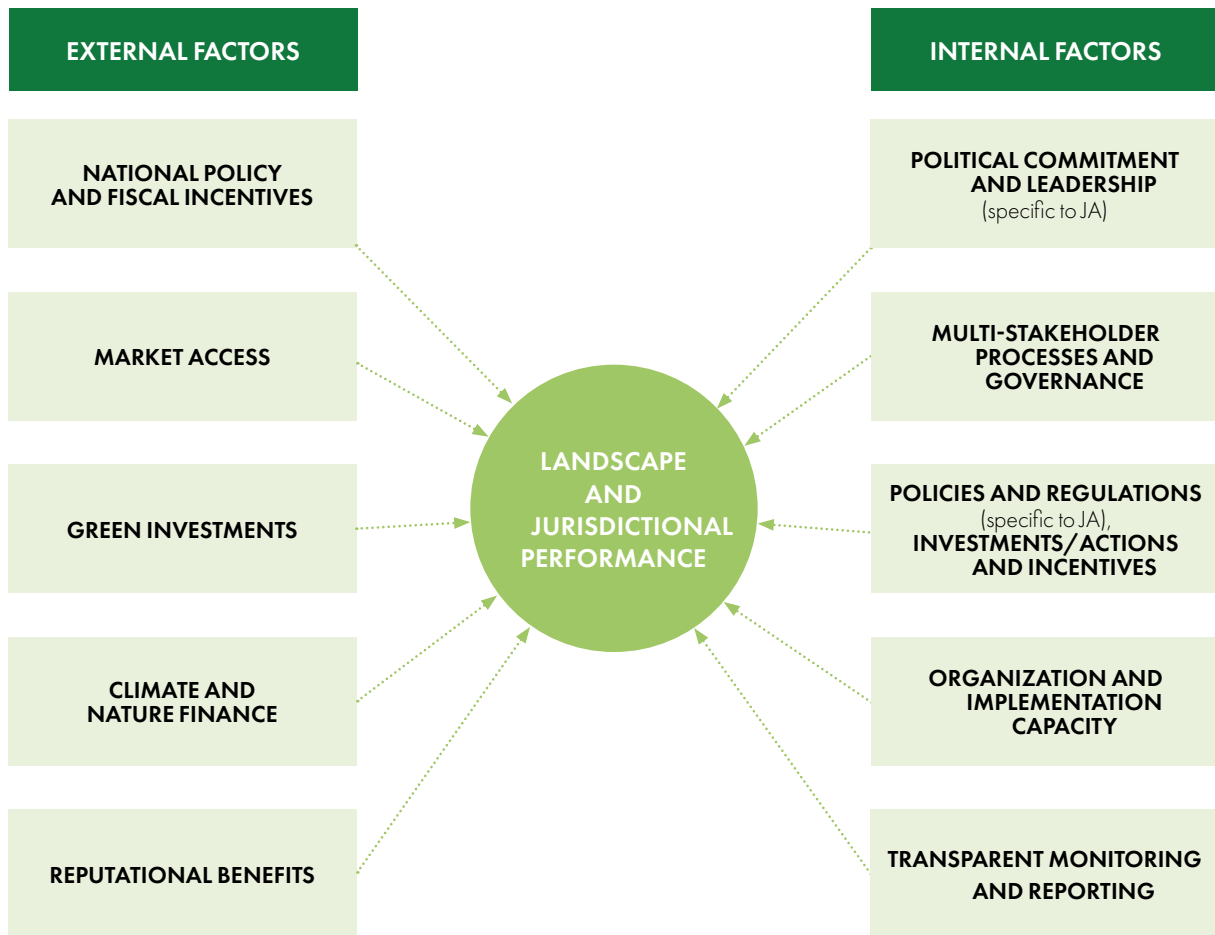
“
MEANINGFUL PARTICIPATION AND LONG-TERM COLLABORATION AMONG DIFFERENT STAKEHOLDER GROUPS ARE RECOGNIZED AS KEY SUCCESS FACTORS IN THE IMPLEMENTATION OF LJA

The premise of these approaches is that governments, producers, sourcing companies, civil society, Indigenous Peoples, local communities and financing institutions see value in working together to achieve shared

goals according to each stakeholder’s mandate and capacity (ISEAL et al. 2021). Multi-stakeholder collaboration enables mainstreaming and incorporation of sustainable land-use principles in policies (Palmer et al. 2023) and practices (Essen and Lambin 2021) at jurisdictional or landscape scale, supporting sustained change.

Companies’ landscape-scale action contributes to these shared goals and creates impacts beyond their individual supply chains (ISEAL 2022). The scale “that is meaningful for delivering impact” (ISEAL 2023a) depends on the challenge the stakeholders agree to tackle. In addressing commodity-driven deforestation, one consideration is the commodity’s supply shed (Proforest 2020), which could be a radius of 50 km around a mill for palm oil (Unilever 2022) or 360 km around a meatpacking plant (Barreto et al. 2017). Because of the role of governments in regulating land use, high performance at the jurisdictional scale would mean less opportunity for leakage between areas already covered by voluntary commitments and would reduce the risk for companies of sourcing from producers, including smallholders (Seymour 2017).

FIGURE 2 FACTORS AFFECTING LANDSCAPE AND JURISDICTIONAL PERFORMANCE



Sources: Adapted from Boyd et al. (2018) and LTKL (2023).

There are a number key factors within the landscape or jurisdiction (internal) and outside (external) that influence the progress of a landscape or jurisdiction (see [Figure 2](#)) before achieving outcomes. These building blocks take time to develop properly. Multi-stakeholder processes to agree shared goals and management plans at landscape and jurisdictional scale can take two to three years to complete (CGF FPCoA 2021; TFA et al. 2023b). Conservatively, it can take at least another two years after stakeholders start taking action together before outcomes at landscape

and jurisdictional scale can be achieved (CGF FPCoA 2021). Quantified evidence of outcomes could also be further delayed due to time-lag, for example to demonstrate reduced deforestation from commodity production.

The length of time needed to build multi-stakeholder collaboration at landscape and jurisdictional scale has been described as “the greatest challenge to its success” (Fishman et al. 2017). Still, voluntary certification schemes have stagnated (UNFSS 2022) due to challenges including cost, while corporate pledges are insufficient to halt deforestation (Seymour 2017; Taylor and Streck 2018). As such, investing in approaches focusing on stakeholder collaboration on the ground is necessary, given their potential to create outcomes that are at scale and sustained with the buy-in of local stakeholders.

“

INVESTING IN APPROACHES FOCUSING ON STAKEHOLDER COLLABORATION ON THE GROUND IS NECESSARY, GIVEN THEIR POTENTIAL TO CREATE OUTCOMES THAT ARE AT SCALE AND SUSTAINED



2. COMPANY COLLABORATIONS WITH STAKEHOLDERS IN PRODUCTION LANDSCAPES

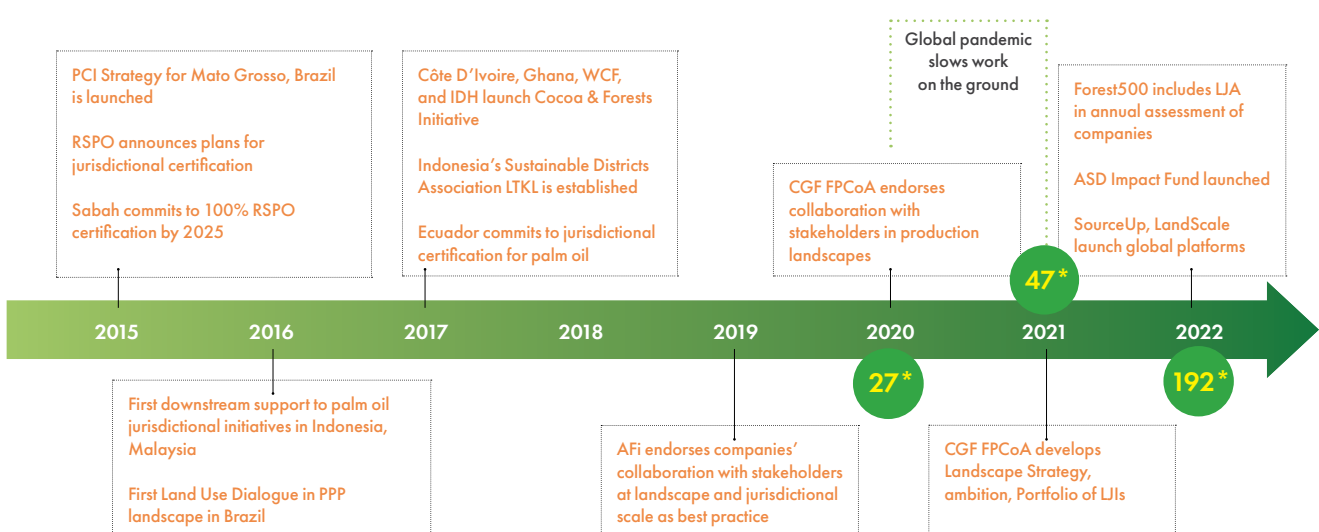
2.1 THE BEGINNING OF A PROMISING JOURNEY

The use of LJA to achieve sustainable commodity production as part of wider sustainable land use is nascent. In 2015, at COP21 in Paris, the state of Mato Grosso in Brazil announced its plan to achieve low-emission development (PCI Institute 2022). The jurisdictional-scale shared goals in its Produce, Conserve and Include (PCI) Strategy include reducing deforestation and improving productivity in commodities such as soy and cattle.

In the same year, the RSPO announced plans to implement jurisdictional certification for palm oil, with pilots at various levels: Seruyan district in Indonesia, Sabah state in Malaysia and nationwide in Ecuador (RSPO 2017, 2022). As the number of landscape

and jurisdictional initiatives (LJIs) grew, often initially through the support of philanthropic and country donors, companies started experimenting with using LJAs to complement their individual supply chain action. The first downstream company support for palm oil jurisdictional initiatives in Indonesia and Malaysia was recorded in 2016 (TFA et al. 2023c). In 2017, the WCF brought together 29 chocolate and cocoa companies in the Cocoa & Forests Initiative – and since then the number has increased to 37 supporters – to work with the governments of Côte D’Ivoire and Ghana, and IDH to address cocoa-driven deforestation (TFA et al. 2022; WCF n.d.). The collaboration has resulted in multiple landscape initiatives in these countries (TFA et al. 2023a).

FIGURE 3 SELECTED MILESTONES OF COMPANY USE OF LJA FOR SUSTAINABLE COMMODITY PRODUCTION



* Number of companies reporting landscape-scale action to CDP (CDP 2023b).

Source: Authors based on public information

Companies reporting through CDP have shown a clear increase in their collaboration with stakeholders in production landscapes, including in regions where they do not have direct operations. In 2020, the first year CDP introduced LJAs-related questions in its forest questionnaire, 27 companies reported engaging at this scale across various commodities (CDP 2023b). This number increased to 47 companies in 2021 and jumped to 192 companies in 2022. Some 92 companies stated their disclosures to CDP in 2022 that they planned to take landscape-scale action in the subsequent two years.



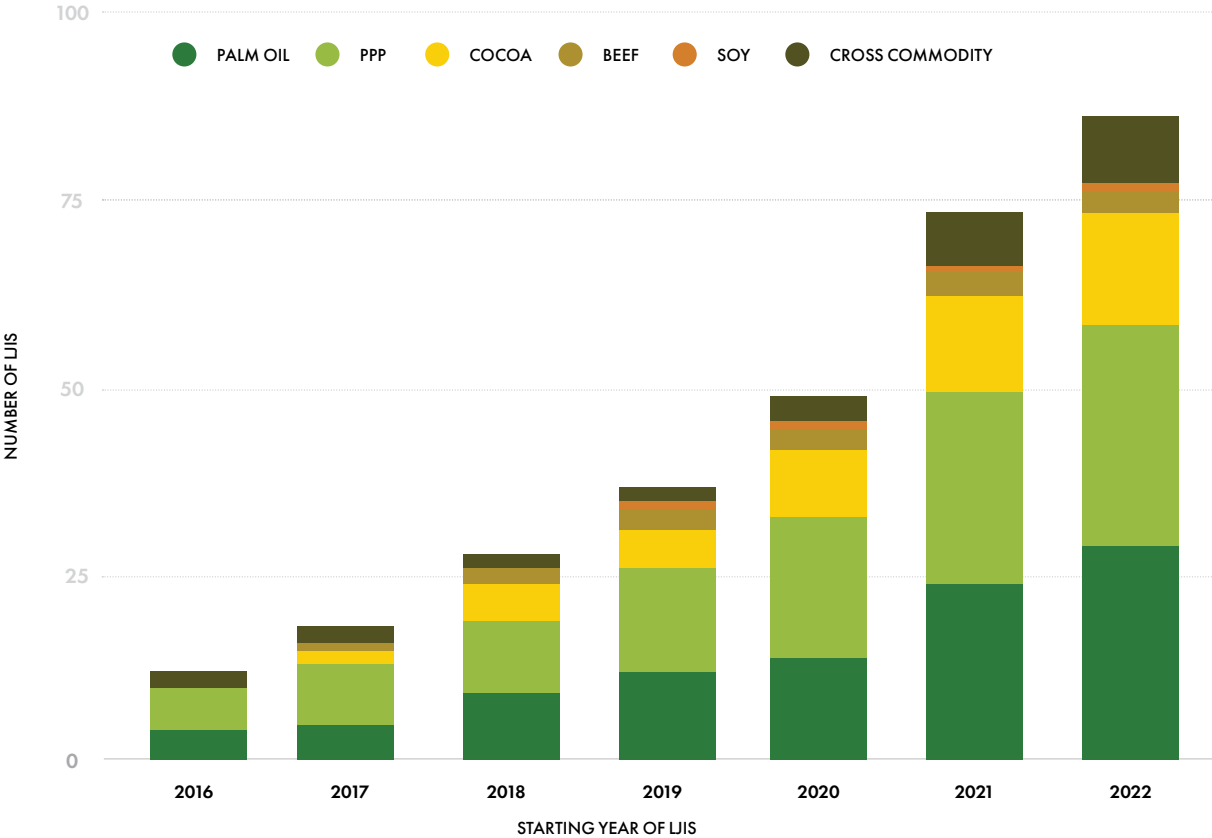
192 COMPANIES, OR 20% OF COMPANIES REPORTING FOREST-RELATED RISKS, REPORTED TO CDP IN 2022 THAT THEY WERE TAKING LANDSCAPE-SCALE ACTION

Several factors may have contributed to this rise in interest, aside from the realization that the private sector cannot address systemic issues like commodity-driven deforestation alone.

First, a number of CSOs and service providers have built initiatives with clear pathways for companies to take action. IDH brought support from the governments of the Netherlands and Norway to leverage private sector funding for their landscape and jurisdictional initiatives; their portfolio spans 22 LJIs in 12 countries (IDH n.d.). Proforest is working with companies and other partners in 10 LJIs, including the Siak Pelalawan Landscape Programme in Riau province in Indonesia that has been supported by eight palm oil buyers and producers since 2018 (SPLP n.d.). Earthworm Foundation is supporting its member companies to take action in 12 landscapes globally (Earthworm n.d.).

Second, it is clear that civil society expects companies to collaborate with stakeholders to address social and environmental issues and contribute to positive impacts on the ground. The [Accountability Framework](#) includes landscape and jurisdictional action within its Core Principle 10 and provides additional operational guidance on this topic (AFi 2020; AFi 2023).

FIGURE 4 LJIS SUPPORTED BY DOWNSTREAM AND MIDSTREAM COMPANIES*



* The graph reflects when the LJIs were established, not when the downstream and midstream companies started supporting them
Sources: TFA et al. (2023a, b, c, d, e).



The Framework was first published in 2019 and represents the consensus of [more than two dozen environmental and human rights NGOs](#) from around the world.

Third, several private sector coalitions have embraced LJA and created the space and tools for collective action and learning. The CGF FPCoA, a coalition of 21 of the world's largest manufacturers and retailers established in 2020, endorsed collaboration with stakeholders in the companies' sourcing areas to complement existing strategies to work on their individual supply chains (CGF FPCoA 2021). After the coalition developed its landscape strategy in 2021, all members began supporting at least one LJI – for about half of these companies, this was the first landscape-scale investment in the group's focus commodities. Learning from its landscape initiatives

in western Africa, the WCF has collaborated with other partners to build programmes in Brazil and Colombia (TFA et al. 2023a). The establishment of the ASD's Impact Fund enables palm oil derivative buyers to pool funding to support a jurisdictional initiative in Indonesia (ASD 2022). For most of the Fund's current 10 supporters, this was their first foray into creating change in palm oil landscapes.

Last but not least, companies' interest in making positive impacts at scale in production landscapes is also driven by emerging recognition for their landscape-scale action, for example by CDP and Forest500, and global agreements on key targets related to climate and nature. Various guidance for companies to determine their own targets and take action have been developed in the past few years (see [Section 3.2](#)).

2.2 COMPANIES ARE BUILDING MOMENTUM FOR LANDSCAPE-SCALE ACTION

The following sections highlight summary findings from a study that TFA, Proforest and CDP have conducted in 2022 and 2023 to dive into why and how downstream and midstream companies are working with stakeholders in landscapes producing cocoa, palm oil, pulp and paper, beef and soy. A CDP team reviewed all relevant corporate disclosures on landscape-scale action submitted as part of its forest questionnaire in 2022 to assess whether the initiatives met the basic CDP criteria for LJIs (CDP 2023a). Qualifying landscape initiatives are those that demonstrate scale, a certain degree

of multi-stakeholder processes, collective goals and actions and transparent reporting systems.

The research team complemented this data with information on other LJIs identified through interviews and desktop research. Understanding that the use of LJAs to address challenges related to sustainable commodity production at scale is nascent, the study considered diverse LJIs at different stages of development, following the basic tenets of multi-stakeholder collaboration and contribution to shared goals.

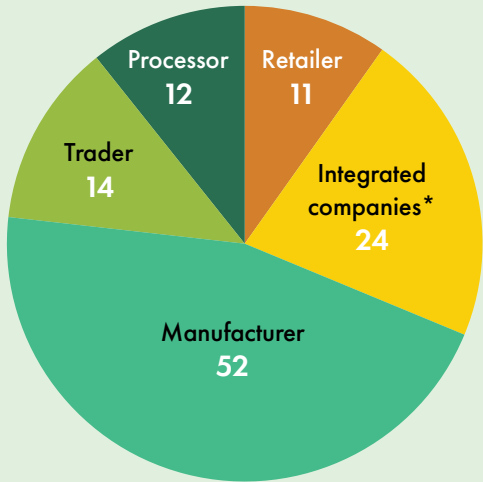
BOX 1 CORPORATE LANDSCAPE-SCALE ACTION IN NUMBERS

113 downstream and midstream companies* have taken landscape-scale action in cocoa, palm oil, pulp and paper, beef and soy landscapes;
59 of these companies reported landscape-scale action to CDP** in 2022;

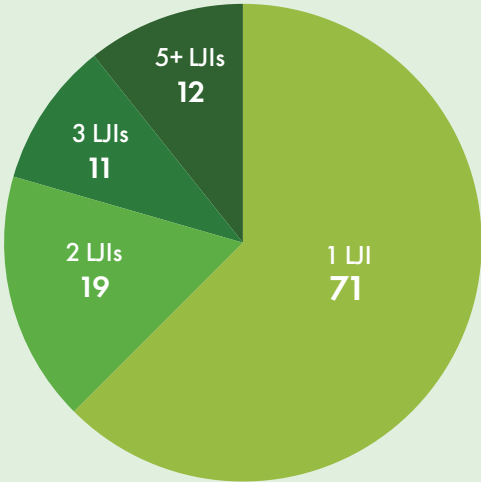
61 of them are part of company-led coalitions;
17 companies have taken landscape-scale action in more than one commodity;
91 LJIs*** have been supported by downstream and midstream companies. (See the map of LJIs in [Figure 5](#))

* Including integrated companies.
 ** Only companies that support qualifying LJIs as per CDP assessment.
 *** Identified in the course of this study.

COMPANIES SUPPORTING LJIS BY TYPE



NUMBER OF LJIS SUPPORTED PER COMPANY



* Also manage production areas
 Sources: TFA et al. (2023a, b, c, d, e).






Close to half of the companies identified in this study as having taken landscape-scale action are manufacturers, and most focus on palm oil and cocoa production areas, which include a large number of smallholders (see [Box 1](#)). In pulp and paper, the majority of the 26 companies identified as taking landscape-scale action are integrated companies that also manage forests, which makes the business case for their engagement in LJs different to that of pure midstream and downstream companies.

The study did not collect data on when each downstream and midstream company first started taking landscape-scale action, but about two-thirds of companies only support one LJ (see [Box 1](#)), suggesting they are at the beginning of their journey.

Only 10% of the companies identified in the study are retailers, with the majority starting to take landscape-scale action in 2021 and 2022. The key challenge for them was to obtain internal buy-in for investing in places so far away from their direct operations. According to corporate submissions to CDP in 2022, 32 companies sourcing palm oil, 13 in pulp and paper and four sourcing cocoa were planning to take landscape-scale action in the next two years.

The main reasons these companies gave for not yet having taken action in production landscapes were that it was not an immediate corporate priority and they lacked knowledge on how to engage at this scale.

TABLE 1 CORPORATE ACTION IN COCOA, PALM OIL, PULP AND PAPER, BEEF AND SOY LANDSCAPES

	 COCOA	 PPP	 PALM OIL	 BEEF	 SOY
# of downstream and midstream companies taking landscape-scale action	29	26**	62	5	14
# of companies planning to take landscape action*	4	13	32	1	0
# of LJs identified	20	32	37	7	5
# of LJs with more than one commodity	13	4	20	3	4
# of LJs supported by more than one company	12	13	27	5	4
Production model	Smallholders (less than 5 ha av.)	Mostly large concessions	(i) Large concessions; (ii) 7 mln smallholders (2-6 ha av.)	(i) Large privately-owned ranches; (ii) 2 mln smallholders (<50 ha) in Brazil	(i) Large privately-owned farms (> 2,500 ha av.); (ii) Medium size farms (500 ha av.); (iii) 20% of smallholders (<20 ha av.)
Certification and % of global area covered^a	22.8%-37.6%	11%	11.7-12%	None	2.1%-2.8%
Company-led coalitions supporting landscape-scale action	WCF	CGF FPCoA	CGF FPCoA, POCG, ASD	CGF FPCoA	CGF FPCoA, SCF
Read more	Cocoa report	Pulp and paper report	Palm oil report	Beef report	Soy report - forthcoming

* Reported to CDP

** Mostly integrated companies that also manage forests

Sources: TFA et al. (2023a, b, c, d, e); a 2020 data in ITC 2022; b Preferred by Nature n.d.



Landscape or jurisdictional initiatives are found in most of the top five producer countries for each of the commodities covered by this study. Indonesia and Brazil tie for the highest number of initiatives supported by companies – 21 LJIs each – with the key difference that most of the LJIs in Indonesia focus on palm oil, while in Brazil, about half focus on pulp and paper and the rest on beef and soy. It is worth noting that LJIs in soy and beef were only found in Brazil – and only in three states – while large markets, such as the EU, also import from Argentina and the United States (Chatham House n.d.).

Companies support nine LJIs in Ghana and Côte d'Ivoire, mostly focusing on cocoa, with palm oil and rubber as secondary commodities in several. Beef and soy significantly lag other sectors in terms of the number of LJIs supported by downstream and midstream companies, with only seven and five identified, respectively. Two possible reasons for this slow progress was the success of the soy moratorium in Brazil to manage deforestation in the Amazon (Heilmayr et al. 2020) and the soy

production model that relies mainly on large, privately owned farms that have the right to clear natural vegetation. Protection of such area that legally can be converted needs incentives such as compensation for lost revenue (Proforest 2017).

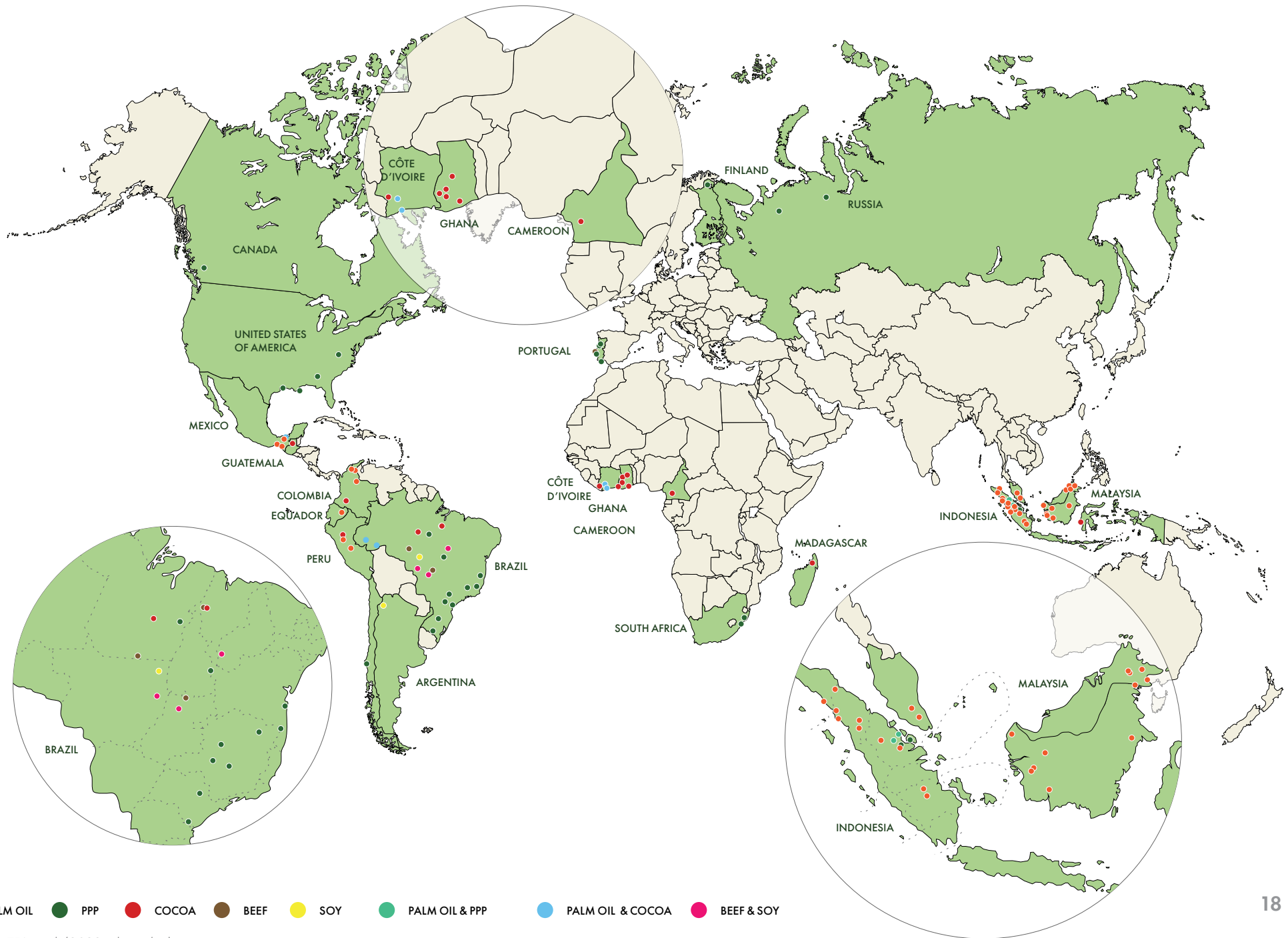
Based on submissions to CDP, companies' understanding of landscape-scale action is limited, particularly in the case of those sourcing pulp and paper, beef and soy. In pulp and paper, 32 companies disclosed engagement with 44 LJIs to CDP in 2022, but only 19 of these initiatives – engaged by 15 companies – qualify as LJIs according to CDP criteria (TFA et al. 2023b). In beef, only 4 out of 22 initiatives qualify (TFA et al. 2023d), and in soy, only 4 out of 17 (TFA et al. 2023e). Most of the non-qualifying initiatives lack the engagement of other stakeholders in the landscape, a critical component to realize the potential of LJAs.

CDP's matrix for assessing LJIs disclosed by companies has been incorporated into the initial guidance from the Science-based Targets for Nature (SBTN) for companies to set land targets, which include landscape engagement as one of the three targets for land (CDP 2023a). CDP is also aligning with the Taskforce for Nature-related Financial Disclosures (TNFD).



INDONESIA AND BRAZIL TIE FOR THE HIGHEST NUMBER OF INITIATIVES SUPPORTED BY COMPANIES – 21 LJIS EACH

FIGURE 5 LJIS SUPPORTED BY DOWNSTREAM AND MIDSTREAM COMPANIES






Sources: TFA et al. (2023a, b, c, d, e)

2.3 WHY COMPANIES TAKE LANDSCAPE-SCALE ACTION

To understand why downstream and midstream companies want to collaborate with stakeholders in production landscapes, the research team reviewed company submissions to CDP (see Table 2) and complemented this with interviews; representatives from 37 companies were interviewed for this study. The main reason that companies take landscape-scale action is clear: to comply with their

own commitments, particularly those related to no deforestation and conversion. Companies sourcing palm oil pointed out that landscape-scale action could bring efficiency in meeting No Deforestation, No Peat, and No Exploitation commitments, for example by not duplicating supplier engagement efforts, by pooling resources in priority regions and engaging governments (TFA et al 2023c).

TABLE 2 TOP FIVE LANDSCAPE-SCALE GOALS SUPPORTED BY COMPANIES*

 COCOA	 PALM OIL	 PPP
Increased adoption of sustainable production practices	Avoided deforestation and conversion	Conservation of forests and natural ecosystems
Conservation of forests and natural ecosystems	Livelihood improvements	Restoration
Avoided deforestation and conversion	Increased adoption of sustainable production practices	Increased protected areas
Livelihood improvements	Decreased ecosystem degradation rate	Habitat connectivity restored/improved
Restoration	Smallholders mapped	Decreased ecosystem degradation rate

*Company submissions to CDP on landscape-scale action for beef and soy are not included because the number of qualifying initiatives is too low to draw conclusions.

Sources: TFA et al. (2023a, b, c)

In contrast with companies involved in the other focus commodities of this study, companies in pulp and paper linked their landscape-scale investment to meeting climate, biodiversity and/or water commitments (TFA et al. 2023b). The cocoa sector also mentioned climate goals as a reason to take landscape-scale action, likely because cocoa is predominantly produced by smallholders. As such, any company efforts to reduce emissions from

supply chains need to involve thousands of small cocoa farms (TFA et al. 2023a). In cocoa, palm oil and beef, the inclusion of smallholders and securing sustainable supply in the long term are key reasons for companies to collaborate with stakeholders on the ground (TFA et al. 2023a, c, d).

Companies in pulp and paper mentioned the opportunities to improve relationships with local communities and stakeholders as a key reason they engage, likely influenced by the fact that most are integrated corporations that also manage forests (TFA et al. 2023b). Companies sourcing beef and soy stated that supporting suppliers to comply with Brazil’s Forest Code is one reason for engaging at landscape scale; all beef and soy UIs supported by companies are in Brazil (TFA et al 2023d, e).



THE MAIN REASON THAT COMPANIES TAKE LANDSCAPE-SCALE ACTION IS CLEAR: TO COMPLY WITH THEIR OWN COMMITMENTS, PARTICULARLY THOSE RELATED TO NO DEFORESTATION AND CONVERSION

BOX 2

KEY FACTORS INFLUENCING WHERE COMPANIES TAKE LANDSCAPE-SCALE ACTION

The following key factors determine where downstream and midstream companies invest in landscape and jurisdictional-scale efforts:

Landscape is part of the supply chain of the company's material commodity

A link to the company's sourcing areas is necessary, even if it is only at subnational jurisdiction level, and not to plot. This is one of the CGF FPCoA's Principles of Collective Action in production landscapes (CGF FPCoA 2021).

Existence of important and/or threatened natural ecosystems

Aside from carrying out their own assessments to prioritise areas for engagement – often supported by precompetitive coalitions to which the companies belong – companies also consider investing in regions highlighted by advocacy organizations, for example, the Dvinsky forests in Russia as campaigned for by Greenpeace (TFA et al. 2023a) and the Leuser ecosystems in Sumatra, Indonesia as highlighted by Rainforest Action Network (TFA 2021).

Presence of credible partners in the landscape

Most downstream and midstream companies engage with stakeholders in production landscapes and jurisdictions through the LJ implementers, which are usually NGOs or service providers. As such, their presence is critical. Support from other companies also increases confidence in the initiative and reduces the risk for other supply chain actors of taking action.

Local government's commitment

The leadership of local governments, for example in promoting multi-stakeholder processes in Mato Grosso and through REDD+ programme in Ghana, has attracted companies' support (TFA et al. 2023a and d). In palm oil, half of the 38 companies disclosing engagement with qualifying LJs to CDP in 2022 reported that they supported goals for sustainability principles to be integrated into local policies. However, local government's commitment remains a secondary consideration for most companies when deciding on where to engage in palm oil production areas (TFA et al. 2023c).

2.4 HOW COMPANIES TAKE ACTION FOR SUSTAINABILITY AT LANDSCAPE SCALE

How downstream and midstream companies take landscape-scale action for sustainable commodity production varies, with several types of engagement observed in the five focus commodities of the study, which are presented below.

1. INDIVIDUAL COMPANY ACTION

Individual company action is particularly observed in the early adopters of LJs, for example Unilever, which started supporting jurisdictional initiatives in Indonesia and Malaysia in 2016 (Unilever 2022). Companies can also strengthen their existing sustainability programmes by integrating them into multi-stakeholder efforts at landscape scale. Mondelēz International did this through its flagship Cocoa Life programme (TFA et al. 2023a). Organizations such as IDH, Conservation International,

Proforest, the World Wide Fund for Nature (WWF) and the Earthworm Foundation have also brought companies together to support production landscapes or jurisdictions. Several of these organizations have a ready portfolio of LJs that companies can review to contribute into.

2. COLLECTIVE ACTION FACILITATED BY PRECOMPETITIVE COALITIONS

Precompetitive coalitions provide a trusted space for peer-to-peer information exchange and collective efforts to address shared challenges; this makes them fertile ground for collective action. Coalitions also enable companies to start landscape-scale action with minimal investment, because their contribution can be combined with the resources of peers. Coalitions do this in different ways. For

example, collaborating the governments of Côte d'Ivoire and Ghana and IDH, WCF co-created the Cocoa & Forests Initiative for its members to support, while the SCF developed the Farmers First Cluster, which has the potential to support shared multi-stakeholder goals at landscape and jurisdictional scale (TFA et al. 2023a, e).

The CGF FPCoA developed a portfolio of LIJs for members to consider, and most of these are now supported by more than one member company. The ASD created a first-of-its kind Impact Fund to pool resources, with members contributing voluntarily. This joint resource has enabled the coalition to commit € 1.5 million to Kaleka's Mosaik Initiative for five years to 2026 (TFA et al. 2023c).

“

PRECOMPETITIVE COALITIONS PROVIDE A TRUSTED SPACE FOR PEER-TO-PEER INFORMATION EXCHANGE AND COLLECTIVE EFFORTS TO ADDRESS SHARED CHALLENGES; THIS MAKES THEM FERTILE GROUND FOR COLLECTIVE ACTION

3. SUPPORTING LANDSCAPE OR JURISDICTIONAL PROCESSES/PLATFORMS

The PCI Institute in Mato Grosso, Brazil is a multi-stakeholder platform endorsed by the state government and supported by partners including IDH and the REDD+ Early Movers programme to coordinate and monitor progress towards achieving shared targets under the PCI Strategy. The presence of the PCI strategy and platform has attracted beef and soy sourcing companies to work with partners in the state to contribute to the jurisdiction's sustainability goals (TFA et al. 2023d, e).

Sabah state in Malaysia has developed a multi-stakeholder entity as part of its piloting of RSPO jurisdictional certification to realize its target to be 100% RSPO-certified by 2025 (TFA et al. 2023c).

In Brazil, pulp and paper producer Suzano has supported the development of landscape planning in two landscape initiatives that grew out of Land Use Dialogues facilitated by Brazilian Forests Dialogue's Forestry Forum of the Amazon (TFA et al. 2023b).

4. INTEGRATED COMPANIES BUILDING OWN LANDSCAPE INITIATIVES, INVITING BUYERS






This type of engagement has been observed, albeit in a limited way, in pulp and paper, where many of the companies taking landscape-scale action also manage forests, and palm oil. In Indonesia, APRIL has established the Riau Ecosystem Restoration by securing five ecosystem restoration concessions adjacent to its timber plantations; in Brazil, Tetra Pak is collaborating with its supplier Klabin to restore parts of the Atlantic Forest (TFA et al. 2023b). Palm oil integrated company Musim Mas has developed five smallholder hubs to train government-appointed extension service workers, who then assist smallholders to implement good agricultural practices. General Mills, Nestlé and AAK have supported this work (Musim Mas 2020, 2021, TFA et al. 2023c).



© Malt Schimpf, Twenly20

The study also reviewed the actions that downstream and midstream companies are supporting through LJI; these activities are aligned with the goals that they are supporting (see [Section 2.3](#)). Table 3 provides examples of actions or progress that LJIs have made and to which companies have contributed. More detailed information is available in reports by TFA, Proforest and CDP on corporate landscape-scale action in cocoa, palm oil, pulp and paper, beef and soy.

TABLE 3 ACTION AND PROGRESS IN LJIS SUPPORTED BY COMPANIES

COMMODITY	EXAMPLES OF ACTION AND/OR PROGRESS
 <p>COCOA</p>	<ul style="list-style-type: none"> • Mondelez International, Touton, Cargill, Ecom, Lindt, Mars, Olam Food Ingredients and Sucden through the WCF supported Proforest to conduct a baseline assessment of Asunafo-Asutifi landscape in Ghana and facilitate stakeholder discussions to develop a shared vision and management plan for the area. • Mondelez has supported more than 200,000 cocoa farmers to better understand forest policies, protection and restoration and to diversify their income by planting additional crops. Farmer incomes have increased by 15% and 33% in Ghana and Côte D’Ivoire respectively. • Ecom and Cargill are working with IDH In Grand Mbam landscape in Cameroon to support cocoa agroforestry and community-based forest restoration.
 <p>PALM OIL</p>	<ul style="list-style-type: none"> • Unilever and PepsiCo, through IDH, supported training for government officials in Aceh Tamiang, Indonesia to review data from a system to detect deforestation developed by the World Resources Institute. • Musim Mas’s smallholders hubs in Indonesia, supported by General Mills, AAK and Nestlé, have trained 4,500 smallholders and 377 extension officers in good agricultural practices. • Earthworm Foundation, supported by downstream companies, engages concession holders and aims to have 100% traceability to plantation through its LJI in the Southern Central Forest Spine Landscape in Malaysia.
 <p>PULP AND PAPER</p>	<ul style="list-style-type: none"> • Mars, Nestlé and 3M, through the Earthworm Foundation, are supporting Tsay Keh Dene First Nation in Canada to protect high conservation value (HCV) areas and engage timber companies operating in their territory. • HP has collaborated with WWF, International Paper and Sylvamo to restore forest areas in the Mogi Guaçu river in Brazil. With HP support, the programme doubled its restoration target for 2024.
 <p>BEEF</p>	<ul style="list-style-type: none"> • Carrefour Foundation supported IDH to set up the Sustainable Production of Calves Program in 2018 to support calf breeders in the Juruena Valley region in Mato Grosso, alongside multi-stakeholder processes that include setting shared goals at municipality level. • Beef and soy buyers are supporting Conservation International’s initiative that, in collaboration with state agency Embrapa, has trained 53 rural producers and 40 rural extension experts in Tocantins, Brazil to implement low-carbon, regenerative soy and beef farming on 60,000 ha of farms.
 <p>SOY</p>	<ul style="list-style-type: none"> • Several members of the CGF FPCoA and SCF support an initiative by the Instituto de Pesquisa Ambiental da Amazônia (Amazon Environmental Research Institute), Produzindo Certo and Proforest to facilitate multi-stakeholder processes to set shared goals at municipality level in the western part of Mato Grosso, Brazil. • International Union for Conservation of Nature National Committee of the Netherlands, Solidaridad, Fundación Vida Silvestre, Cefetra and Dutch Dairy support Argentina’s Soy Chaco initiative by matching certified producers with traders and buyers. The programme targets production of 250,000 tonnes of responsible soy, as well as conserving and restoring forests.

Sources : TFA et al. (2023 a, b, c, d, e)

2.5 TOOLS FACILITATING COMPANIES TO TAKE LANDSCAPE-SCALE ACTION

The wider community of proponents of landscape-scale action, including private sector actors, have developed tools and mechanisms to facilitate company engagement. The following is a non-exhaustive list of these frameworks and tools,

a number of which are still emerging, reflecting the nascent nature of the use of LJA to achieve sustainable commodity production at landscape and jurisdictional scale.

INCLUSION OF CORPORATE LANDSCAPE-SCALE ACTION IN LEADING FRAMEWORKS

[CDP](#), the world's biggest environmental disclosure system for companies, has included a set of questions related to landscape- or jurisdictional-scale action in its forest questionnaire since 2020 and updates these annually (CDP n.d.). In 2023, updates included queries on corporate reasons for (and for not) engaging at landscape scale, options of involved stakeholders, and a new question on production or consumption volumes from engaged landscapes (CDP 2023b).

[Forest500](#), which assesses and ranks the 350 companies that are most exposed to deforestation risks in beef, leather, palm oil, paper, soy and timber, has included corporate use of LJA in its annual assessment since 2022 (Forest500 n.d.).

WWF's [Palm Oil Buyers Scorecard](#) included companies use of LJA on the ground in its 2021 report, which found that 14% of respondents have taken this approach (WWF 2021).

The [SBTN's Land Targets](#) has included landscape engagement as one of the voluntary targets for nature for companies (see more in [Section 3.2](#)) (SBTN 2023).

The [TNFD](#), a business-led initiative that is developing a self-reporting framework on companies' impact on nature, advises companies to take a landscape perspective on nature (Forests and Finance n.d., TNFD 2023b).

KNOWLEDGE EXCHANGE AND LJA OPERATIONALIZATION

[Jurisdictional Action Network](#) is a community of more than 2,200 proponents of the use of LJA for a forest-positive future. The network, through which members can access and share knowledge, lessons and resources, is facilitated by TFA, which also manages the [JA Resource Hub](#), a repository of best-case examples, guidance and tools related to LJA (TFA n.d. a).

CGF FPCoA's [Landscape Strategy](#) provides an example of how to operationalize LJA, including a landscape ambition based on the members' aggregate production-base footprint (CGF FPCoA 2021) (see [Box 5](#) in [Chapter 4](#)) and principles of collective action in production landscapes.

[High Conservation Value \(HCV\) screening](#) at landscape and jurisdictional scale was developed by the HCV Resource Network in 2019 (HCV Network n.d.). For more recent developments, see a webinar highlighting case studies [here](#).

ISEAL, supported by more than a dozen partners, is developing [a series of guidance](#) papers and tools for companies to claim their investment and action at landscape and jurisdictional scale (ISEAL n.d.).

WHERE TO TAKE LANDSCAPE AND JURISDICTIONAL-SCALE ACTION

CGF FPCoA's [Portfolio of Initiatives](#) showcases 22 LJIs that members were supporting and learning from in 2022 in landscapes producing palm oil, pulp and paper, soy and beef (CGF FPCoA 2022).

Coalitions of subnational jurisdictions committed to sustainable land use include the [Governors' Climate and Forests Taskforce](#) (GCF TF), which includes 43 states and provinces covering more than one-third of the world's tropical forests (GCF TF n.d. a), and [Indonesia's Sustainable Districts Association](#) (Lingkar Temu Kabupaten Lestari; LTKL).

See also a report by TFA and LTKL, [Mapping Commitment of Subnational Government to Sustainable Land Use in Southeast Asia](#), published at the end of 2020.

[SourceUp](#), initiated by IDH, is a global platform that links stakeholders in production landscapes and supply chain actors by providing space for LJIs to report their action and progress.

[1,000 Landscapes for 1 Billion People](#) is a platform that coordinates actions, develops landscape partnerships and finances an integrated landscape investment portfolio (1,000 Landscapes n.d.).

[WWF Forest Forward](#) provides a global interactive platform that showcases the programme's work with companies relating to responsible supply chains and forest management in key production geographies (WWF n.d.).

WWF's [Nature-based Solutions Origination Platform](#) provides landscape-scale investment opportunities for companies and other funders looking to drive quantifiable impact for climate, nature and people.

METRICS TO ASSESS LJI PROGRESS

The [PCI Institute dashboard](#) tracks Mato Grosso state's shared goals and has tracked 16 metrics part of the PCI strategy since 2015. In 2023, the PCI Institute is expanding its monitoring to cover all the 141 municipalities of Mato Grosso, with the goal to monitor all 38 indicators from the PCI Strategy at municipality level in the future (TFA et al. 2023d).

Regional Competitiveness Framework (Kerangka Daya Saing Daerah; KDSD), developed by Indonesia's LTKL, combines multiple indicators and metrics for jurisdictional sustainability performance in national and global frameworks. KDSD aims to assist district members to assess their progress based on existing data and identify data-related gaps to address.

[Sustainable Jurisdictions Indicators](#) is an initiative led by the Indonesian government to measure commitment and progress in the country's commodity-producing districts towards sustainable and inclusive land use, based on national legal frameworks (Bappenas 2022).

CGF FPCoA's [Landscape Reporting Framework](#) provides a tool for member companies and the LJIs they support to report on actions and outcomes related to conservation, restoration, production, livelihoods, land tenure and multi-stakeholder partnerships (CGF FPCoA 2023).

[LandScale](#), co-led by Rainforest Alliance and Conservation International, provides a framework to assess sustainability at landscape and jurisdictional scale as well as guidance and validation service (LandScale n.d.). Companies and other organizations looking to engage LJIs can review their profiles on LandScale's [online platform](#).

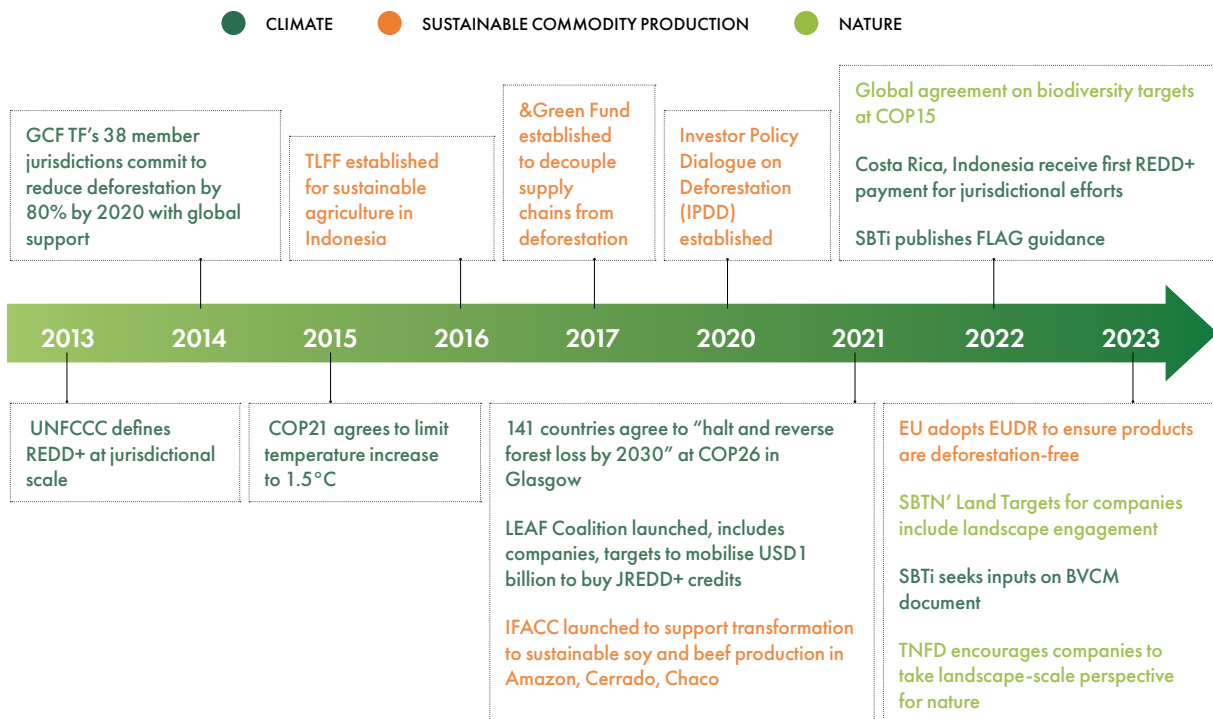


3. BUILDING MOMENTUM AND ACCELERATING PROGRESS AT SCALE

Alongside efforts to implement LJAs as a way to achieve sustainable commodity production, the approaches have been used for other key goals. The antecedents of LJAs include the operationalization of REDD+ at jurisdictional scale, the implementation of companies' voluntary commitments in commodity production and the recognition of Indigenous Peoples' rights (Essen and Lambin 2021; Seymour et al. 2020). Several new and progressing developments that have taken place in the last three years look likely to shift the corporate business

case for taking landscape-scale action and present opportunities for accelerated action. From a regulatory perspective, producer countries have developed and strengthened the implementation of policies related to land use, while consumer countries have started to adopt regulatory measures to ensure products entering the market are deforestation free (see [Figure 7](#)). Global agreements on climate and nature have also guided companies to exploring ways to reach these targets.

FIGURE 6 SELECTED MILESTONES IN CLIMATE AND NATURE EFFORTS AND FINANCING FOR TRANSFORMATION TO SUSTAINABLE PRODUCTION



This chapter presents briefly these emerging levers to mobilize more companies to collaborate with other stakeholders on the ground. The chapter closes with preliminary observations and examples of possibilities to align efforts and resources from

companies, governments, donors and the finance sector to accelerate progress to achieve nature, climate and people outcomes at landscape and jurisdictional scale.

3.1 LANDSCAPE-SCALE ACTION TO ASSIST COMPANIES TO MEET POLICY AND REGULATORY COMPLIANCE

Government interventions through policies and regulations have been, and will continue to be, the force that creates a level playing field for the private sector and other stakeholders (OECD 2019). These interventions are also a foundation of coordinated efforts at the local, regional and national level for sustainable development and production.

Traditionally, government regulations and policies were developed separately for each sector, such as for agriculture, forestry, energy and environment, with limited interaction between them. The United Nations' Sustainable Development Goals are a key effort to bring a holistic development model and achieve a green economy (World Bank 2012).

The climate crisis is another key driver for a cross-sectoral perspective as governments worldwide highlighted how different sectors would contribute and interact to achieving their nationally determined contribution (NDC) since the Paris Agreement in 2015 (United Nations, n.d.).

Policies and regulations in countries producing key forest-risk commodities can create the enabling conditions to foster transformation in rural development models. [Figure 7](#) highlights selected regulations and policies in three producing countries, namely Indonesia, Brazil and Ghana, which represent countries with companies' landscape-scale action across all commodities covered under this study. It is important to note that other major commodity producers including Malaysia, Côte d'Ivoire and Argentina also have progressive policies.

“

GOVERNMENT POLICIES AND REGULATIONS HAVE BEEN, AND WILL CONTINUE TO BE, THE FORCE THAT CREATES A LEVEL PLAYING FIELD FOR THE PRIVATE SECTOR AND OTHER STAKEHOLDERS

BOX 3

OPPORTUNITIES PROVIDED BY REGULATIONS AND POLICIES

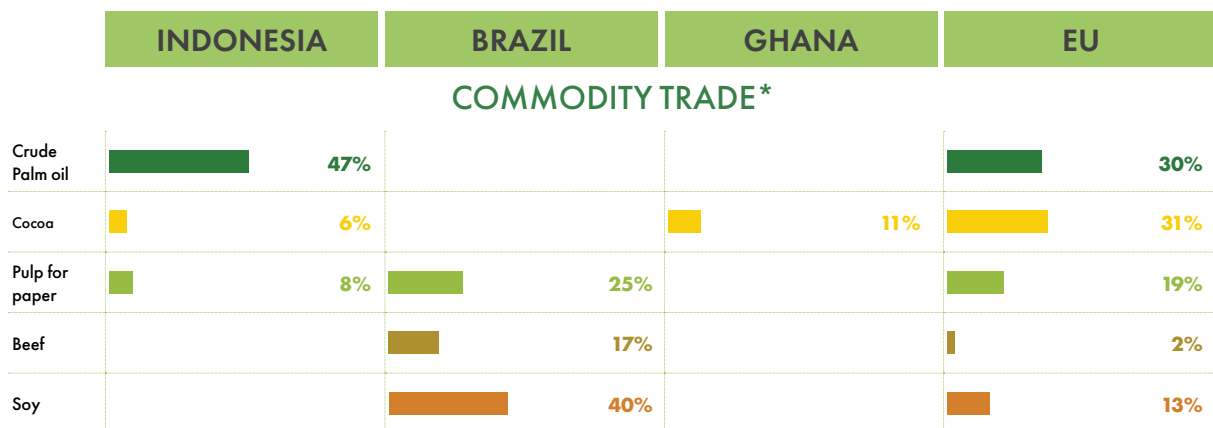
Regulations and policies related to commodity production, market access and land in producer and consumer countries provide:

- **Level-playing field** for companies in commodity production areas or sourcing from them;
- Potential **shared goals** for stakeholders on which to build collaboration; and
- Umbrella to allow national and subnational **governments to allocate public resources** to achieve shared goals.

These producer countries' regulations and policies include the mandatory Indonesian Sustainable Palm Oil certification for all concessions (Indonesia Ministry of Agriculture 2020) and Brazil's Forest Code, which requires producers to preserve 80% of native vegetation in their farms in the Amazon biome and in general 20-35% in the Cerrado (De Siqueira et al. 2017; Azevedo et al. 2016). Indonesia, Brazil and Ghana have also developed NDCs with clear targets to reduce emissions from land use; Ghana's REDD+ strategy and programme is instrumental to mobilizing company collaboration in cocoa (TFA et al. 2023a).

Sustainability requirements from the consumer countries are also becoming more defined. This chapter looks at the EU as an example of a major market that is shifting from voluntary sustainability assurances, for example, in the form of certification and company commitments, to regulatory ones. The EUDR, adopted in mid-2023, requires commodities imported to the market from the end of 2024 to be deforestation-free and produced in compliance with laws in the producing countries. Failure to comply with the EUDR will result in fines of potentially up to 4% of the company's turnover in the EU (Idle 2023).

FIGURE 7 REGULATIONS AND POLICIES INFLUENCING COMMODITY PRODUCTION AND TRADE IN SELECTED COUNTRIES



SELECTED KEY POLICIES INFLUENCING COMMODITY PRODUCTION AND TRADE

- [Mandatory ISPO certification](#) (2020)
- [National Action Plan for Sustainable Palm Oil for 2019-2024](#)
- [Moratorium on palm oil expansion](#) (2018-2021)
- [Moratorium on development in primary forests and peatland](#) (2011, made permanent in 2019)
- [Enhanced NDC](#)
- Amazon soy moratorium (2006, 2016)
- Brazilian Cattle Agreement/cattle moratorium (2009)
- Forest Code (1965, 2012)
- [NDC](#) (2022)
- Action Plan for Deforestation Prevention and Control (2023)
- [National Climate-Smart Agriculture and Food Security Action Plan](#) (2016)
- [Ghana national REDD+ strategy](#) (2016)
- [Updated NDC](#) (2021)
- [EU Green Deal](#) (2019)
- [EU Deforestation Regulation](#) (EUDR, 2023)
- [EU Corporate Sustainability Due Diligence Directive](#) (EU CSRD, 2022)
- Upcoming: [EU Corporate Sustainability Reporting Directive](#) (EU CS3D)

*Export weight and percentage of global trade for producers, import weight and percentage in global trade for the EU. Data presented is for 2020 (Chatham House 2021 a), based on the reports of exporting and importing countries (Chatham House 2021 b) as quoted in the International Merchandise Trade Statistics (IMTS) collected by national customs authorities. The exception is for the pulp and paper data, which is from 2021 (FAO 2023).

Source: Authors

Cocoa, palm oil, timber, soy, beef, coffee and rubber – and products derived from these commodities – are included under the EUDR and represent about 60% of the EU’s annual agricultural imports of almost €120 billion in 2021. Rubber has the highest import value at €20 billion, followed by soy at €14 billion and timber at €11 billion (Geijer 2023).

The EU commission will classify producing countries, and potentially “parts of a country”, meaning subnational regions, as low, standard or high risk. While imports from jurisdictions categorized as high risk will see more checks (Bellfield and Tan 2023), all will require traceability to plot level (European Commission 2023). Guidance on implementation of the regulation is still being developed. Civil society groups suggest the benchmarking should be

commodity-specific and that subnational benchmarking should be applied for high-risk countries or those with a high variation in deforestation rates between subnational regions (Bellfield et al. 2023).

Producing countries have reacted strongly to the EUDR, for example through a letter to the EU in mid-2023 signed by ambassadors from 17 producing countries, including Indonesia, Malaysia, Ghana, Brazil, Colombia and Peru. The EUDR “disregards local circumstances and capabilities, national legislations and certification mechanisms of developing producer countries, their efforts to fight deforestation, and multilateral commitments, including the principle of common but differentiated responsibilities”, the letter states (WTO 2023; Argentina et al. 2023).



Producer country governments and CSOs cautioned on the potential of the EUDR to exclude smallholders and/or higher-risk subnational jurisdictions that are committed and progressing towards sustainable land use – but are not there yet (CPOPC 2023; Fern 2023a). Traceability to farm level would become more difficult for commodities such as palm oil and beef, sectors in which many smallholders and indirect suppliers operate. As such, the EUDR could become an incentive for companies to prioritize sourcing from large suppliers or shift sourcing altogether to low-risk regions (Spencer 2023a; Idle 2023; Geijer 2023) instead of trying to engage to create change. To ensure that the EU achieves its objectives to protect and restore forests as stated in the EU Communication in 2019 (European Commission 2019), stakeholders are calling for the EU to complement the EUDR with additional measures (Fern 2023b).

While the EUDR, without complementary measures, presents significant risks of unintended negative consequences, it also presents an opportunity to bring stakeholders to work together. The regulation requires companies to ensure that products are traceable and comply with national laws by the end of 2024. Research by Trase found that up to 74%, or 14 million ha, of the soy production in the Amazon and Cerrado biomes in 2020 could have some form of non-compliance with Brazil's Forest Code

(Richens 2023; Vasconcelos et al. 2023). Most of this soy is exported to China and EU (Geijer 2023). Companies can use engagement with stakeholders on the ground through IJIs and, more importantly, existing multi-stakeholder platforms in key producing countries like Indonesia, Malaysia, Brazil, Peru and others to help them on regulatory compliance by (Proforest 2022, Spencer 2023a).

1. SUPPORTING INFORMATION COLLECTION

Costs to trace commodities to plot level for smallholders are considerable, with one estimate in the range of €6–14 per farm, which may recur annually as smallholders switch buyers (Spencer 2023b). Precompetitive collaboration on data sharing can help make traceability accessible and affordable as supply chain actors split the costs (Gardner et al. 2019; Spencer 2023a). One example of such action is in Central Kalimantan, Indonesia, where Indonesian NGO Kaleka, supported by Unilever and in collaboration with the local governments, has mapped 8,117 smallholders managing 21,514 ha in Seruyan and Kotawaringin Barat districts and integrated the data into the local government's database (TFA et al. 2023c).

2. COLLECTIVE RISK ASSESSMENT

Commodity buyers can conduct collective risk assessments of their suppliers in specific sourcing regions. The National Wildlife Federation carried out such an exercise for two members of the CGF FPCoA sourcing beef from Pará state in Brazil. The results were used by Solidaridad, Imaflores and Proforest to develop an IJI targeting one of the high-risk municipalities, expanding on existing efforts (TFA et al. 2023d).





© Aguila Guerrero/ CIFOR

3. MITIGATE RISKS AND SUSTAINABILITY CHALLENGES AT SCALE

Companies can support local stakeholders to develop and implement landscape- or jurisdictional-scale management plans and accelerate processes to secure land tenure and other permits necessary to comply with national laws (Spencer 2023a). Cocoa companies supported the development of a shared vision and integrated management plan in Asunafo-Asutifi landscape in Ghana (TFA et al. 2023a). Landscape- and jurisdictional-scale agreements often include social inclusion as well as environmental goals and can help companies assess and manage a variety of risks other than deforestation, e.g the risk of child or forced labour in commodity production.



LANDSCAPE- AND JURISDICTIONAL-SCALE AGREEMENTS OFTEN INCLUDE SOCIAL INCLUSION AS WELL AS ENVIRONMENTAL GOALS

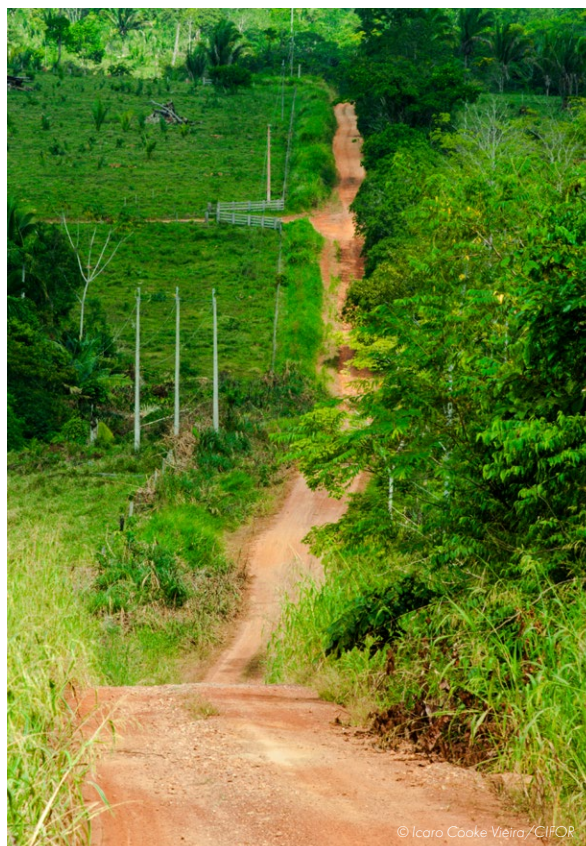
4. DEVELOP AND/OR USE MONITORING SYSTEM AT JURISDICTIONAL SCALE

A jurisdictional-scale monitoring system will help companies to comply to the EUDR and will also support governments to enforce regulations (Proforest 2022, Spencer 2023a). Examples include SeloVerde, a state-level cattle compliance monitoring system implemented in Pará and Minas Gerais in Brazil that can identify producers contaminating the supply chain with illegal deforestation (GTFI 2023).

5. USE LJI PILOTS TO IMPROVE PRACTICE WITHIN AND CROSS SECTORS

LJIs can be used to test and learn about new solution to structural problems within and across sectors. For example, the piloting of new traceability solutions for beef with calves producers in Juruena Valley in Matto Grosso, Brazil, by IDH, supported by Carrefour, has expanded into a protocol and is now on track to be used for a million cattle in the Amazon states of Mato Grosso and Para (TFA et al. 2023d).

More than a third of LJIs supported by downstream and midstream companies identified in this study cover more than one commodity covered by regulations such as the EUDR, highlighting the possibility for cross-sectoral collaboration.



© Icaro Cooke Vieira/ CIFOR

3.2 COMPANIES' LANDSCAPE-SCALE ACTION FOR NATURE, CLIMATE AND PEOPLE GOALS

Global agreements to limit the temperature increase to no more than 1.5° Celsius above pre-industrial levels (UNFCCC n.d.) and to conserve and manage 30% of land areas and restore 30% of degraded areas by 2030 (UNEP 2022) have set the pace for stakeholder action. The private sector can play a central part in a just and equitable transition to achieve these targets, with the forest, land and agricultural sector (FLAG) having an important role.

The FLAG sectors account for 23% of global emissions and, without strong policy action, this share is likely to grow (OECD 2020). To meet climate goals, these sectors need to contribute up to 37% of the emission reductions and removals needed by 2030, and 20% by 2050 (SBTi and WWF n.d.). Nature-based solutions are critical in addressing



these emissions – by some estimates, these solutions could deliver 37% of the necessary cost-effective CO₂ mitigation potential by 2030 (Griscom et al. 2017; TNC 2017).

Until recently, there were limited methodologies and guidance to help companies to account for and take action to reduce or remove land-based emissions. The SBTi and the GHG Protocol are the primary organizations that set out target-setting, accounting and reporting frameworks for climate-related goals. Under their frameworks, companies set science-based targets, meaning targets aligned with the goals of Paris Agreement, and should consider direct emissions (Scope 1), indirect emissions from consuming energy (Scope 2) and other indirect emissions that occur in their value chains (Scope 3) (SBTi n.d.).

Key to buyers of forest-risk commodities, the SBTi produced in 2021 its Net Zero Standard guidance, which applies for companies in general, as well as a specific guide for FLAG companies¹ in 2022. The GHG Protocol produced guidance for corporate accounting of emissions for various sectors, with a draft for guidance for the land sector published at the end of 2022.

¹ Companies in the forest and paper products sector, in food production, food and beverage processing, food and staples retailing, and tobacco, or in any other sector with FLAG-related emissions that total more than 20% of overall emissions across scopes (SBTi 2022a).

BOX 4

WHAT LJA OFFER COMPANIES

Learning from the experience in addressing commodity-driven deforestation, landscape and jurisdictional-scale approaches offer companies the opportunity to:^{*}

- Take action and effect change in complex supply chains even when full transparency and traceability to site level has not yet been achieved;
- Effectively deploy limited resources, contributing to multiple co-benefits for climate, nature and people in sourcing and production landscapes and making progress across multiple corporate goals;
- Enhance the resilience of local actors, including smallholders, farmers, local communities and Indigenous Peoples in and around a supply base and priority regions;
- Future-proof areas that are frontiers of deforestation and natural ecosystem conversion by supporting efforts and/or incentives that mitigate the risk of future land conversion;
- Contribute to inclusive governance for land use that goes beyond site-level interventions to help achieve climate and nature goals at scale.

Source: TFA and Proforest 2023.

^{*} Read [Chapter 2](#) to see examples of actions that will achieve multiple goals and targets.

Analysis conducted by CSOs found the GHG Protocol’s draft guidance on land sector and removals focuses mainly on accounting and claims for farm-level emission reductions (Conservation International et al. 2022). Similar to the EUDR, this focus on progress at farm level could inadvertently push companies to shift supply out of specific areas or replace higher risk producers, including smallholders. Both are viable options and potentially cost-efficient quick wins from the perspective of accounting for Scope 3 emissions. However, such “remove and replace” supply chain strategies do not address the issue of leakage, nor do they provide structural solutions that would allow mitigation of emissions from FLAG sectors at scale.



THERE IS A CLEAR NEED TO INCREASE RAPIDLY FINANCE FOR CLIMATE-RELATED EFFORTS -- AFOLU SECTORS REQUIRE 26-FOLD INCREASE IN ANNUAL FUNDING

These CSOs are calling for the GHG Protocol to develop mechanisms that would allow for carbon impacts generated outside of farm boundaries and within jurisdictional sourcing regions to be accounted, at least partially, within a company’s GHG footprint (Conservation International et al. 2022). This is critical

considering the interdependency between plantations and the ecosystems around them that enable commodity production through water and temperature regulation (Seymour et al. 2022).

There is also a clear need to increase rapidly finance for climate-related efforts – the agriculture, forestry, other land use and fisheries sectors require a nearly 26-fold increase in annual funding to \$423 billion by 2030 to shift to a low-carbon and climate-resilient trajectory (Climate Policy Initiative 2022). Multiple companies interviewed for the study stated that the inclusion of action outside of plantation level to count at least partially against Scope 3 emissions would be a game changer in incentivizing FLAG companies to take action at landscape and jurisdictional scale. One influencing factor is how emission reduction has become part of the performance metrics for senior management, including their bonuses (Hill 2021).

Separate from reporting and accounting for Scope 3 emissions, the SBTi is developing guidance for beyond value chain mitigation (BVCM) as a mechanism through which companies can contribute towards a “societal net zero” goal (SBTi 2022b). The exact scope and expectations for BVCM are unclear, pending the publication of guidance.

FIGURE 8 ISSUES ADDRESSED BY TARGET-SETTING, ACCOUNTING AND REPORTING FRAMEWORKS

	TARGET SETTING	ACCOUNTING	REPORTING
AFi			
GHG PROTOCOL			
SBTi FLAG			
SBTN			

Issue Areas & Aspects

- Greenhouse gas emissions and removals
- Deforestation and conversion
- Land Tracking
- Land use and landscape engagement
- Human rights

Sources: Afi et al. (2023)



However, the SBTi published a document for public consultation in June 2023 (SBTi 2023). In response, CSOs that have been working with companies taking landscape-scale action have recommended that the SBTi should require, reward or incentivize companies to take BVCM action, considering the necessity to reduce FLAG-related GHG emissions (Conservation International et al. 2023). To address nature goals, multiple organizations are setting up frameworks and tools for companies, including the SBTN, the TNFD, the World Business Council for Sustainable Development, Capitals Coalition and Business for Nature Coalition (TFA and Proforest 2023). While they vary in terminology and technical area, in general these entities frame principles and guidance around avoidance and reduction of impacts on nature, climate and people, before turning to positive additions or benefits through restoration or regeneration.

Relevant to companies taking landscape-scale action within production regions, the inclusion of landscape engagement as one of the SBTN's Land Targets (SBTN 2023) is an important milestone and shows how best practices for companies, including outside of farm, can be integrated within corporate target setting (TFA and Proforest 2023). Companies will need to assess their overall land footprint,

meaning the area needed to produce the commodities they source, and then engage and contribute to materially-relevant LJs that cover an estimated 10% of their land footprint in the first one or two years (SBTN 2023, p. 29–30). This approach is aligned with the approach taken by the CGF FPCoA to set the coalition's ambition for landscape engagement (see [Box 6](#)) (CGF FPCoA 2021).

The SBTN is piloting the beta version of its guidance on Land Targets with 17 companies, including L'Occitane, Nestlé and Neste, and expects to roll out updated guidance for the wider community to use in 2024 (WEF 2023). The TNFD encourages companies to take a broader landscape-scale perspective, recognizing the interdependencies of various ecosystems. Companies need to focus on "locations" linked to supply chains and "areas where the organization is likely to have significant potential dependencies and/or impacts" (TNFD 2023b).

Similarly, under its Locate Evaluate Assess and Prepare framework, which is optional for TNFD reporting, the organization recommends that companies develop a list of ecosystems, not just the locations of their assets, and define mitigation opportunities for these (TNFD 2023a). The inclusion of companies' landscape-scale action in nature frameworks is encouraging, but it remains to be seen how much this would incentivize companies to take such action. The reality is that while companies are setting targets and taking action for climate, they are lagging on nature and biodiversity. Among Fortune Global 500 companies, 83% have targets to address climate change, compared to only 5% for biodiversity loss (McKinsey Sustainability 2022).



THE INCLUSION OF LANDSCAPE ENGAGEMENT IN SBTN'S LAND TARGETS SHOWS HOW BEST PRACTICES FOR COMPANIES, INCLUDING OUTSIDE OF FARM, CAN BE INTEGRATED WITHIN CORPORATE TARGET SETTING

3.3 SCALING UP ACTION AND ACCELERATING PROGRESS FOR SUSTAINABLE LAND USE AT SCALE

As described in [Figure 2](#), investments, incentives and other financial support are essential to ensure landscape and jurisdictional performance (Boyd et al. 2018; Palmer et al. 2023). LJA require various forms of financing aligned with the specific needs of the jurisdiction (Fishman et al. 2017) and landscape finance needs to be integrated to fund multiple activities across sectors that support the landscape objectives (Shames 2023). To accelerate progress and achieve sustainable land use at scale and positive outcomes for climate, nature

and people, it is critical to align resources and efforts and for all stakeholders to perform their roles (see Table 4). While the starting points and key outcomes of stakeholders' efforts could vary – some aiming primarily to achieve sustainable commodity production, while others may focus on climate or nature – collaboration with stakeholders at landscape and jurisdictional scale typically have multiple benefits due to their multi-stakeholder nature and the interconnectedness of systemic issues that the stakeholders try to address.

TABLE 4 STAKEHOLDERS IN LJAS AND POTENTIAL ENTRY POINTS

LJA STAKEHOLDERS (ISEAL et al. 2021)	STARTING POINTS/ KEY OUTCOMES
National and subnational governments through regulations and their enforcement, incentives, technical support, and leadership in multi-stakeholder processes, Indigenous Peoples and local communities as right holders, producers and/or implementers of key activities.	Sustainable commodity production, including for regulatory compliance, addressing commodity-driven deforestation and natural conversion, which have climate and nature benefits, and supporting smallholders and suppliers in their transition to sustainability.
Civil society actors, supported by country and philanthropic donors and/or companies, implement LJIs, convene or support multi-stakeholder processes/platforms, advocate for effective policies and/or monitor progress.	Climate, including avoiding emissions, for example, by reducing deforestation or addressing forest fires; carbon removals, for example, through restoring peatland and other ecosystems; and adaptation.
Producing enterprises to improve their practices and support smallholders.	Conservation for nature and biodiversity, which usually also has climate benefits and helps landscapes/jurisdictions become more resilient.
Sourcing companies to support through LJI implementers, suppliers and leverage own funding to generate others.	Green growth or Sustainable Development Goals.
Financing institutions through various mechanisms to support sustainable commodity production, reduce emissions and conserve natural ecosystems.	

As highlighted in [Section 3.1](#), national and subnational governments in producer countries can create enabling conditions through policies and regulations and facilitate multi-stakeholder processes. Importantly, governments can also use public budget to directly support smallholders and local communities, and influence behaviour through incentives such as ecological fiscal transfers to support nature conservation. Ecological fiscal transfers have been used in Brazil, Portugal, France, China and India, growing from \$350 million in 2007 to \$23 billion in 2020 (IPBES n.d.; Busch et al. 2021). In Indonesia, the governments of Siak and Sanggau – both are palm oil producing districts – have piloted district-to-village ecological fiscal transfers for incentivizing forest protection (LTKL 2022). The two district governments have allocated IDR5.5 billion (\$351,000) combined for these incentives in 2023.

Support from consumer country governments for efforts to achieve sustainable commodity production is also growing. IDH has leveraged funding from the governments of the Netherlands and Norway to secure matching support from companies in their LJIs around the world. Switzerland's State Secretariat for Economic Affairs has funded programmes in Indonesia, Colombia, Vietnam and Côte d'Ivoire to strengthen local governance, establish monitoring and evaluation frameworks and other areas less attractive for the private sector (SECO 2023; Earthworm 2023).

Relevant initiatives from multilateral organizations include the Food Systems, Land Use and Restoration Impact Program, a \$345 million initiative led by the World Bank and funded by the Global Environment Facility (FOLUR n.d.). The programme



focuses its work on eight commodities, including cattle, soy, cocoa and palm oil, in 27 countries, including Ghana, Côte d'Ivoire, Brazil, Peru, Indonesia, Malaysia and Thailand.

Philanthropic donors, who generally channel their support through CSOs, are key in seeding innovations, including on how to implement LJA and building ecosystems to support this work. The Climate and Land Use Alliance (CLUA) and the David and Lucile Packard Foundation adopted a jurisdictional approach in their grant-making strategy in 2014, with an emphasis on forest and peatland protection and emissions reduction from the palm oil sector (Seymour 2014; Morris 2017). Their support, alongside support from others such as the Good Energies Foundation, has been essential in the development of at least one-third of the LJIs supported by companies in palm oil areas (TFA et al. 2023c). In Brazil, CLUA has supported grantees focusing on policy and governance reforms, community land rights management and others in the Amazon and Cerrado (CLUA 2022).

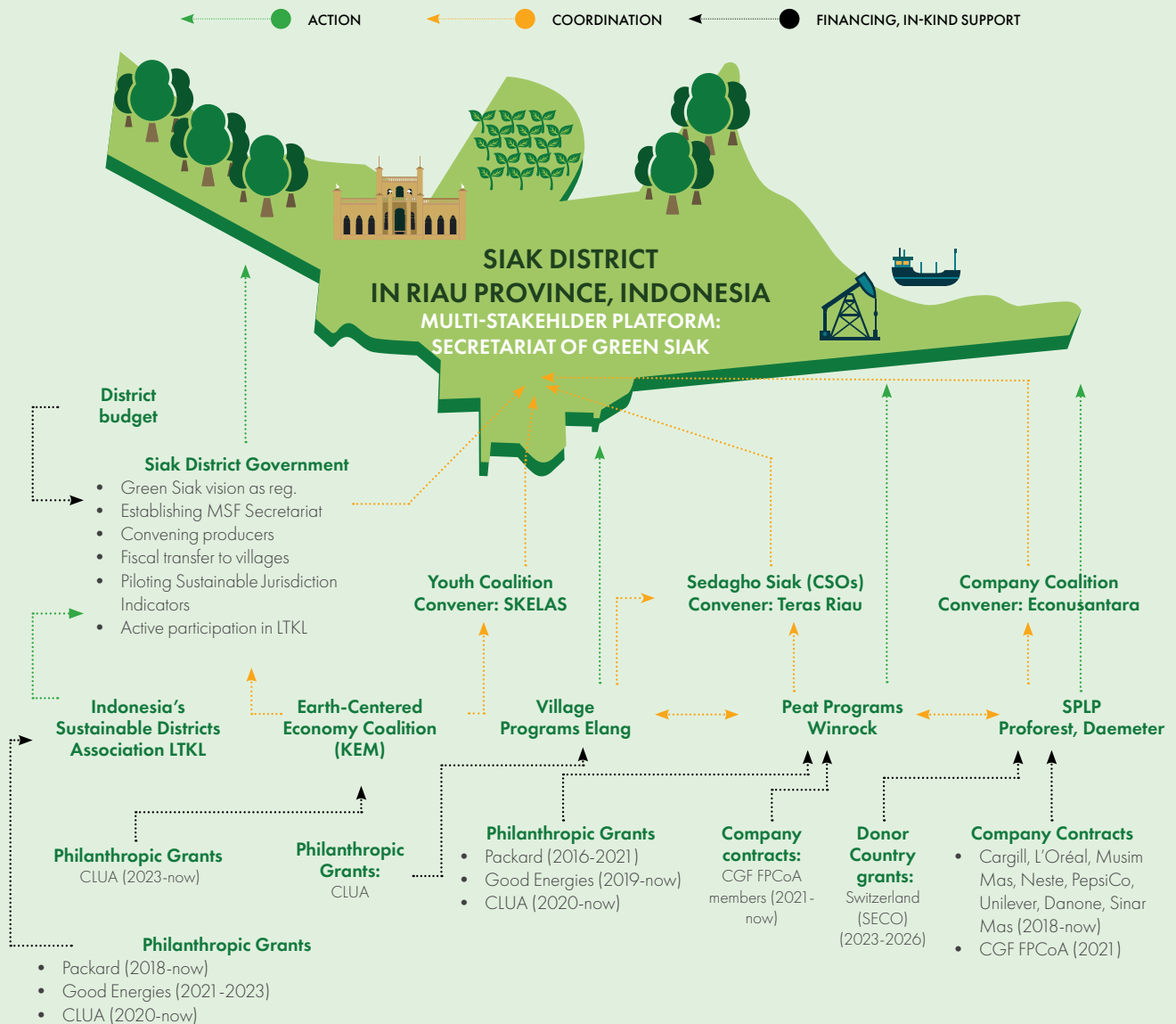


PHILANTHROPIC DONORS, WHO GENERALLY CHANNEL THEIR SUPPORT THROUGH CSOS, ARE KEY IN SEEDING INNOVATIONS

The financial sector's active engagement in addressing deforestation is also growing. The Investor Policy Dialogue on Deforestation was established in 2020 to engage government agencies and industry platforms on deforestation, which is seen as posing financial, regulatory, litigation and reputational risks to the sector (TFA n.d. b). By the end of 2022, it had 78 financial institution members from 20 countries, with approximately US\$ 10 trillion in combined assets under management. The collaborative investor initiative is now focusing its work in Brazil, Indonesia and the consumer countries.

More financing instruments are also being developed to support producers to transition to sustainable commodity production, although only a few have clear jurisdictional criteria that could incentivize change at this scale. One example is &Green Fund, which since launching in 2017 has focused its investments on the supply chain transformation of eight commodities in tropical jurisdictions that demonstrate commitment to forest and peatland conservation, evidenced by a clear strategy, social safeguards, progress and monitoring system (&Green 2022). Contributors to the Fund, which amounts to \$144 million, include the Government of Norway, Unilever, Financierings-Maatshcappij voor Ontwikkelingslanden (Dutch Entrepreneurial Development Bank) and Ford Foundation (&Green n.d.).

BOX 5 SIAK: AN EXAMPLE OF MULTI-STAKEHOLDER EFFORTS



Source: Authors from interviews with partners, Government of Siak (2022)

An example of multi-stakeholder efforts and financing coming together can be seen in Siak, a district in Riau, Indonesia producing palm oil, pulp and paper. Forest and peatland fires in 2015 were a turning point for Siak, where half of the area is covered by carbon-rich peat, to commit to becoming a green district (Government of Siak 2022).

Since then, Siak has embarked on a multi-stakeholder process to develop a shared vision, which was integrated into policy through a Head of District regulation in 2018 and strengthened as a District Regulation in 2022. The Green Siak regulation includes an action plan for ISPO certification for palm oil and supporting good agricultural processes, aligned with national policies (see [Figure 7](#)).

The Secretariat of the Coordination Team for Green Siak was established in 2022 to coordinate various stakeholders, directly and through coalitions of private sector actors, CSOs and youth. Each coalition has a convener to simplify coordination.

Siak also actively participates in Indonesia's LTKL, which is supported by a network of partners working on the ground, including Daemeter, Elang, Proforest and Winrock (LTKL n.d.). LTKL, the Earth-Centered Economy Coalition (Koalisi Ekonomi Membumi) and other partners supported Indonesia's Ministry of Investment/Investment Coordinating Board in developing the country's Sustainable Investment Guideline, published at the G20 meetings in Bali in 2022 (BKPM 2022).

More financing facilities now include some form of environmental or social requirements. The Tropical Landscape Finance Facility was launched in 2016 to provide grants and loans to agribusiness in Indonesia (ADM n.d., UNEP FI 2022). The Innovative Finance for the Amazon, Cerrado and Chaco (IFACC), developed by the UN Environment Programme, The Nature Conservancy and TFA, aims to promote the development of financial instruments supporting the transition towards sustainable commodity production. Launched at COP26 in Glasgow in 2021, the IFACC aims to bring \$30 billion of capital to sustainable production of cattle and soy (TFA n.d. c). By the end of 2022, the IFACC had 15 signatories with a commitment to provide \$4.3 billion of capital and had disbursed \$111 million to farmers and other participants through six financial products (UNEP et al. 2023).

One of these products is the Responsible Commodities Facilities, which secured \$11 million of investments from UK-based retailers Tesco, Sainsbury's and Waitrose when it was launched in 2022 (Tesco 2022). The facility developed by Sustainable Investment Management provides low-interest loans to soy farmers committed to no-deforestation production. After its first year, the investment firm has leveraged the retailers' investment to bring in commercial banks Santander and Rabobank and impact fund AGR13 to quadruple the fund to \$47 million (SIM 2023).

“

ANOTHER OPPORTUNITY TO ACCELERATE PROGRESS IS TO ALIGN EFFORTS RELATED TO SUSTAINABLE COMMODITY PRODUCTION TO THOSE OF CLIMATE.

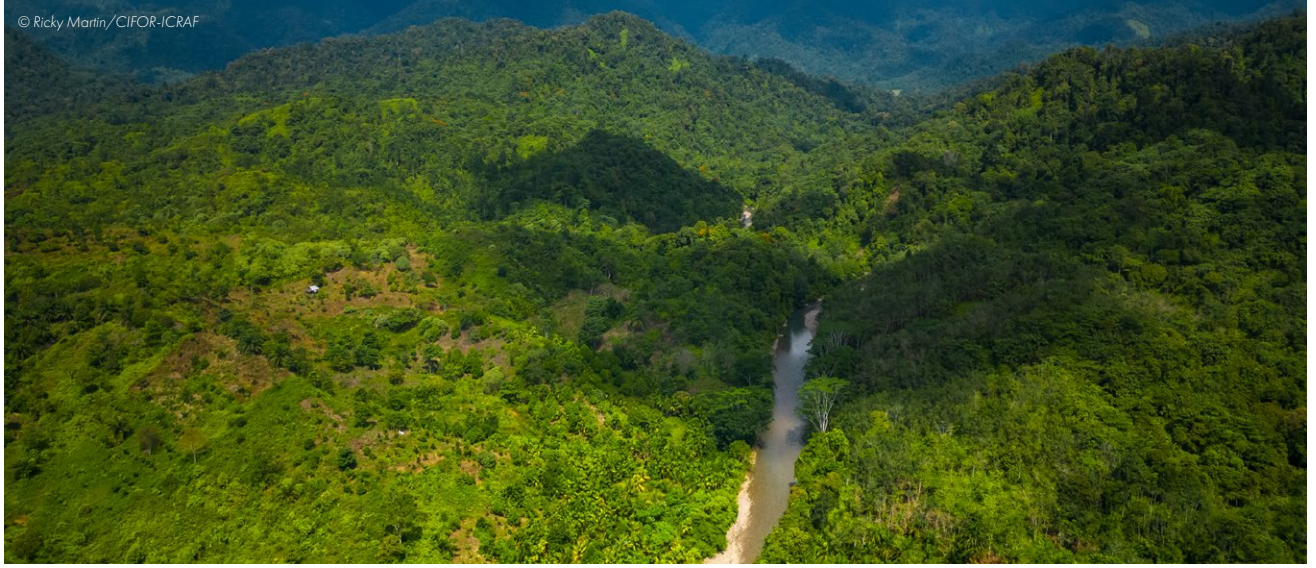
Finally, another opportunity to accelerate progress to achieve sustainable land use and climate, nature and people outcomes at scale is to align efforts related to sustainable commodity production to those of climate. Since the UNFCCC defined REDD+ at jurisdictional scale in 2013, multiple initiatives have emerged to support subnational jurisdictions. Members of the GCF TF have been building jurisdictional strategies and investment plans for REDD+ and low-emission development since 2015, supported by Norway (GCF TF n.d. b). Commodity-producing member jurisdictions where



companies have also taken landscape-scale action include Mato Grosso, Pará and Tocantins states in Brazil, San Martín in Peru, Chiapas in Mexico, Cavally in Côte d'Ivoire and Aceh, Central Kalimantan and East Kalimantan provinces in Indonesia (TFA et al. 2023a, c, d, e).

The REDD+ Early Movers Program, funded by Germany, has also been supporting the multi-stakeholder platform that coordinates the implementation and monitoring of the PCI Strategy in Mato Grosso (REM MT n.d.). The presence of PCI Strategy and PCI Institute as the coordinating multi-stakeholder platform builds confidence in jurisdictional-scale efforts, bringing increased support from downstream and midstream companies for cattle and soy sustainability efforts in the past few years (TFA et al. 2023d).

Another milestone is the establishment of the Lowering Emissions by Accelerating Forest Finance Coalition (LEAF Coalition), which has commitments of over \$1 billion to purchase jurisdictional REDD+ credits, providing results-based payments for forest conservation at subnational and national scale (Emergent 2021). Over 25 companies, including Amazon, Salesforce, Volkswagen and Delta Air Lines, have joined the LEAF Coalition (LEAF Coalition n.d.), showing the potential to bring non-FLAG companies to support efforts to achieve sustainable land use on the ground.



4. CONCLUSIONS AND RECOMMENDATIONS

4.1 WHILE MOMENTUM IS BUILDING, COLLABORATION WITH STAKEHOLDERS IN PRODUCTION LANDSCAPES IS YET TO BECOME A MAINSTREAM CORPORATE STRATEGY

This 15-month study aims to build understanding on why and how downstream and midstream companies collaborate with stakeholders in production landscapes, where most of these companies do not have direct operations, and what is needed to mobilize more landscape-scale action from these supply chain actors. The underlying assumption is that companies are interested in addressing commodity-driven deforestation and creating positive change at scale.

Based on the data collected through interviews, desktop research, company submissions to CDP and further discussions in workshops and consultations for eight reports developed under this study, it is clear that while momentum is building, collaboration with stakeholders in production landscapes is not yet mainstreamed as a corporate strategy.

This study identified 113 downstream and midstream companies that have taken landscape-scale action in cocoa, palm oil, pulp and paper, beef and soy producing regions. Another data set from CDP shows that the number of companies reporting landscape engagement to the disclosure platform quadrupled within one year to 192 companies across all commodities in 2022. While this growth is very encouraging, it remains nascent compared to other sustainability strategies, such as certification. For example, in palm oil, 62 companies have taken landscape-scale action. This is less than 4% of the 1,644 consumer goods manufacturers, processors and/or traders listed as RSPO members as of the

Key short-term outcome to target:

Number of downstream and midstream companies collaborating with stakeholders on the ground reaches **critical mass** to accelerate the **mainstreaming of LJA** as corporate best practice

end of 2021 (RSPO 2022). Another report found that only four companies out of 208 listed as businesses that are “nature progressive” and “most powerful” mention landscape approaches explicitly in their sustainability or annual reports, although 69 mention actions indicative of similar approaches (Elgar 2023).

According to a white paper from AidEnvironment, NewForesight and the International Institute for Environment and Development, transition towards sustainability has four phases: inception, first movers, critical mass and institutionalization (Molenaar et al. 2015). Each phase marks a new level of understanding with sustainability entering the mainstream as stakeholders progress from one phase to the next. The paper suggested that palm oil in Indonesia, which was then 12% RSPO-certified, was at the beginning of the critical mass phase. Other research on tipping points for people suggests 17–30% of a population needs to become engaged to reach the point when a certain belief or behaviour become a major practice (Otto et al. 2020; Koch 2011; Centola et al. 2018). Interventions including new policies and behavioural norms can accelerate the shift to push a system across tipping points and to mainstream desired principles or practices.

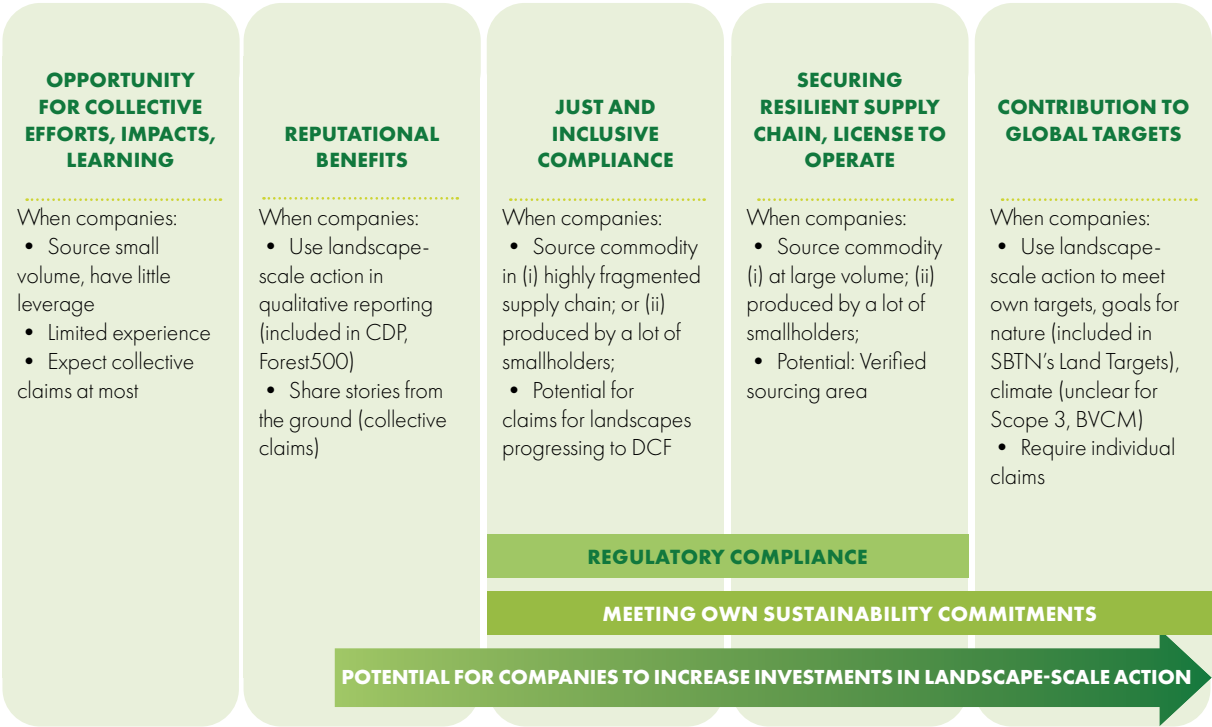
4.2 WHILE VALUE OF COLLABORATING WITH STAKEHOLDERS IS CLEAR, THE BUSINESS CASE FOR COMPANIES NEEDS TO BE STRENGTHENED

It is clear that companies see the value in collaborating with stakeholders in production landscapes to address systemic challenges and create change at scale – 113 companies are doing this already.

However, this study also found that the business case for downstream and midstream companies to take action in places mostly outside of their operational areas varies across and even within companies, and this business case needs to be strengthened if more support is to be mobilized from these supply chain actors. The main business case for companies to take landscape-scale action depends on the

volume of the material commodity that the company sources, the commodity’s production model and the available sustainability assurance systems, and the company’s position in the supply chain. In general, the further the companies are from production and the smaller the volume of forest-risk commodities that they purchase, the more difficult it is to justify spending resources in production landscapes. Different departments in a company may also respond to different business cases, depending on their objectives and performance indicators, which also influences the resources the company can put into landscape-scale action.

FIGURE 9 THE BUSINESS CASE FOR COMPANIES TO TAKE LANDSCAPE-SCALE ACTION



Source: Authors

If a company sources a small amount of a commodity and can meet its sustainability commitments through certification, the business case for taking landscape-scale action might be to learn from others and to create greater impacts through supporting an LJ collectively.. For some companies, the ability to share stories from the ground, or to report landscape-scale action to disclosure frameworks like CDP provides another layer of value.

As companies source bigger volumes of a commodity, and particularly if it is a commodity produced by smallholders, such as cocoa and palm oil, or where the supply chain is heavily fragmented with many indirect suppliers and limited traceability, as in beef and soy, another business case emerges – complying with regulations and commitments. Collaborations with stakeholders, including government, are necessary to ensure that smallholders are

not excluded from supplying to these companies. The cost of helping smallholders transition to sustainability – from mapping their areas and securing legal papers to providing training in good agricultural practices – will also be lower per company as it is shared with peers and other stakeholders. The importance of regulatory compliance will likely increase with the implementation of new legislation such as the EUDR.

For the biggest buyers of certain commodities, taking action on the ground will be critical to securing long-term supply and a licence to operate. Having sustainable land use implemented at jurisdictional scale means a company can future proof key sourcing areas by increasing the resilience of production landscapes and reducing deforestation risks.

Key short-term outcome to target:

The **business case for companies** to collaborate with stakeholders to achieve sustainable land use at scale is **strengthened** by (i) showcasing **quantified and qualitative outcomes** at landscape and jurisdictional scale; and (ii) bringing **more recognition for companies'** landscape-scale action in global frameworks.

Increasingly, companies are making commitments and taking actions to contribute to positive outcomes related to nature, climate and people. One of the benefits of taking a holistic perspective, as occurs under LJAs, is the potential to meet multiple goals and align them with local priorities. Our study indicates significant funding from companies could be unlocked if they are able to count landscape-scale action at least partially against their climate and nature goals.

As most global targets – and company targets – are quantifiable metrics, this business case requires evidence in the form of quantifiable outcomes at landscape and jurisdictional scale. Companies also need to be able to claim a proportion of their contribution to achieving these outcomes (ISEAL 2023b),



INCREASINGLY, COMPANIES ARE MAKING COMMITMENTS AND TAKING ACTIONS TO CONTRIBUTE TO POSITIVE OUTCOMES RELATED TO NATURE, CLIMATE AND PEOPLE

as corporate actors are evaluated individually against their commitments and there is little to no space for collective claims.

Companies, civil society and other stakeholders are working to address these challenges (see [Section 2.4](#) on actions to achieve outcomes, [Section 2.5](#) on tools including for claims, [Section 3.2](#) on climate and nature), as there is a clear and urgent need for more support to be made available for producing regions to transition towards sustainable commodity production as part of wider sustainable land use.

BOX 6

HOW MUCH IS ENOUGH FOR COMPANIES' LANDSCAPE-SCALE ACTION?

The use of LJAs by downstream and midstream companies sourcing forest-risk commodities is nascent, and guidance on the expected level of landscape-scale action is still emerging. Considerations include the scale of the problem, stakeholder expectations and the business case that can be offered to companies.

The CGF FPCoA in its Landscape Strategy introduced the concept of the production-base footprint, namely the aggregate area needed to produce the amount of the Coalition's focus commodities purchased by members. The Coalition has committed to transform production landscapes equivalent to its combined production base-footprint (in hectares) into forest positive landscapes by 2030 by collaborating with stakeholders and use their influence to catalyse a wider transformation (CGF FPCoA 2021).

Another model that could be used is to commit resources based on commodity produced. Integrated company APRIL, for example, has introduced an internal "tariff", allocating to conservation \$1 for every ton of fibre delivered from its plantations (APRIL 2023), thereby securing resources for its programmes, including the Riau Ecosystem Restoration.

There is limited information on the level of resources companies are currently allocating for landscape-scale action. According to a survey in 2021, the combined resources provided to LJAs by 13 members of the CGF FPCoA amounted to at least \$10 million annually (CGF FPCoA 2021). The resources vary across companies. Based on conversations with conveners and LJA implementers, companies in general invest at least \$50,000 annually as they first start engaging with LJAs, while others that have taken landscape-scale action for longer periods can spend over \$1 million annually action across commodities and initiatives. The average company co-funding with IDH is about €330,000 per company per landscape, spread over several years.

4.3 RECOMMENDATIONS FOR COMPANIES AND WIDER COMMUNITY

RECOMMENDATIONS FOR DOWNSTREAM AND MIDSTREAM COMPANIES	RECOMMENDATIONS FOR THE WIDER COMMUNITY
<p>1. INCREASE LANDSCAPE-SCALE ACTION AND INTEGRATE IT INTO CORPORATE SUSTAINABILITY AND BUSINESS STRATEGY</p> <p>It is important that companies continue and increase their support for action to create change at scale in production landscapes, with the understanding that multi-stakeholder collaboration take time to produce outcomes at scale. Companies can further showcase their commitment by integrating landscape-scale action into their sustainability and business strategies.</p> <p>Just as incorporating sustainability principles into local policies helps maintain progress, integrating landscape-scale action into corporate strategy increases the likelihood that the longer-term commitment needed from companies will materialize.</p>	<p>1. ACTIVELY INCENTIVIZE COMPANIES TO INVEST IN LAND-USE TRANSFORMATION AT SCALE IN SOURCING REGIONS</p> <p>Guidance from the wider community supporting commodity production that is just, inclusive and sustainable is essential in determining whether, where and how companies take action. As the social, economic and environmental interdependencies between different ecosystems and land use in production landscapes are clear, governments, CSOs and other guiding entities need to actively incentivize downstream and midstream companies to play their part and contribute to land-use transformation at scale in their sourcing regions.</p> <p>When providing guidance, it is important for stakeholders to take a holistic perspective and consider land-use dynamics to ensure that the goal of nature-, climate- and people-positive future is achieved at scale in commodity producing regions.</p>
<p>2. INVITE AND/OR INCENTIVIZE OTHER PRIVATE SECTOR ACTORS TO TAKE LANDSCAPE-SCALE ACTION</p> <p>Companies can introduce collaboration with stakeholders on the ground to peers individually and in coalitions in which they participate. Coalitions could be powerful places to drive collective action – more than half of the companies identified in this study as having taken landscape-scale action are part of industry platforms – and aggregate impacts, exchange learnings, identify common challenges and define good practice.</p> <p>Companies can also encourage suppliers to take part in initiatives in the landscapes and jurisdictions they source from or produce in to accelerate progress towards outcomes.</p>	<p>2. CREATE MECHANISMS, TOOLS AND OTHER RESOURCES TO GUIDE AND ENABLE VARIOUS TYPES OF COMPANIES TO TAKE LANDSCAPE-SCALE ACTION</p> <p>To build the number of companies taking landscape-scale action to a critical mass and mainstream such action as best practice, more resources and tools should be developed for different types of companies, taking into account where they are in their sustainability journey.</p> <p>This means ensuring that there are also resources and tools available for companies that have not yet begun, or are only just taking the first steps in contributing to multi-stakeholder efforts on the ground.</p>

RECOMMENDATIONS FOR DOWNSTREAM AND MIDSTREAM COMPANIES

3. SPOTLIGHT MULTI-STAKEHOLDERS COLLABORATION TO TRANSITION TOWARDS SUSTAINABLE LAND USE AT SCALE

Companies, particularly consumer-facing ones or those with higher public visibility, have much experience in building narratives and support from a wide range of stakeholders.

They could use their communication prowess and brand power to spotlight how stakeholders are working together to create change on the ground, highlighting action by local communities, smallholders, governments and other partners. This will build the reputational benefit for these stakeholders and could inspire action in others.

RECOMMENDATIONS FOR THE WIDER COMMUNITY

3. BUILD AND UPSCALE THE CAPACITY OF LOCAL FACILITATORS AND IMPLEMENTERS

As LJAs are centred around the collaboration of different stakeholders in production landscapes or jurisdictions, building and upscaling the capacity of local partners to facilitate multi-stakeholder processes and implement initiatives is key to ensuring that actions are effective and outcomes sustained in the long term.

While LJIs are implemented mainly at landscape or subnational level, most implementers are national or international organizations, and may exit the region after several years. As landscape-scale transformation takes time, the presence of committed and capable local partners will be critical to sustain outcomes.

4. ALIGN RESOURCES AND EFFORTS IN COMMITTED AND/OR PROGRESSING LANDSCAPES AND JURISDICTIONS

As [chapters 2](#) and [3](#) highlight, multiple efforts are taking place in commodity production regions to build the different components needed to achieve sustainable land use at scale. Alignment of efforts and resources – and doing this in jurisdictions and landscapes that are already showing commitment and progress – holds the potential to accelerate progress towards achieving outcomes, both qualitatively and quantitatively, at landscape and jurisdictional scale.

Such proof of concept, which should be developed across different commodities and contexts, is critical to build the confidence in these multi-stakeholder approaches and strengthen the business case that could unlock funding from downstream and midstream companies.

ANNEX 1

STUDY OBJECTIVES AND METHODOLOGY

TFA initiated this global study to improve understanding of how company collaboration with stakeholders in production regions is a key strategy to ensure supply of sustainable commodities and to create positive impacts on the ground. Findings and recommendations from this study are expected to help map the way forward to mobilize more landscape-scale action by companies to accelerate progress at landscape and jurisdictional scale.

TFA collaborated with Proforest and CDP to dive into why and how downstream and midstream companies, often without direct operations in production regions, have taken landscape-scale action to address systemic sustainability challenges in cocoa, palm oil, pulp and paper, beef and soy landscapes.

The team also conducted desktop research and analysed company submissions to CDP's forest questionnaire of 2022 that showcase companies' landscape-scale action in these commodities. A report was developed for each commodity to answer these questions, showcase landscape and jurisdictional initiatives and examples of

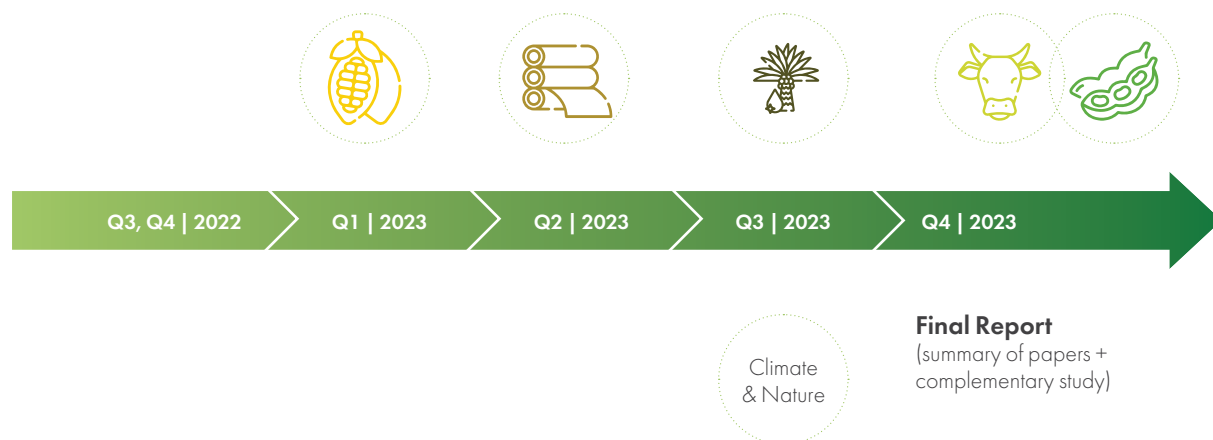
action supported by these companies and provide recommendations on the pathway forward. TFA and Proforest also collaborated on how landscape-scale action can contribute to companies meeting their climate, nature and people goals.

This report summarizes findings from the previous papers and complements them with explanations of how collaboration with stakeholders in production landscapes can help companies support or comply with government policies and proposes ways to scale up action and progress towards sustainable land use at scale.

For this study, the research team across TFA, Proforest and CDP have conducted 100+ interviews with representatives from 47 companies, 28 LJI implementers and 18 other expert organizations. The team also conducted eight workshops to validate preliminary findings and recommendations across the study period. TFA consulted draft findings and recommendations for this final report with representatives of 20+ companies and organizations.

ANNEX FIGURE 1.1

TIMELINE OF GLOBAL STUDY ON COMPANIES' LANDSCAPE-SCALE ACTION



REFERENCES

- &Green, n.d. "[Our structure](#)".
- &Green, 2022. [Annual Report 2022](#).
- 1000 Landscapes, n.d. "[About us: our shared vision for thriving landscapes](#)".
- ADM (Asia Debt Management) Capital, n.d. "[Long term financing for green growth, Tropical Landscape Finance Facility](#)".
- AFi (Accountability Framework Initiative), 2020. [Operational Guidance on Achieving Commitments Through Collaboration: Guidance on How Companies Can Effectively Engage Stakeholders and Fulfil Voluntary Commitments in a Landscape and Jurisdictional Context](#).
- AFi, 2023. [Core Principles](#).
- AFi, GHG Protocol, SBTi and SBTN, 2023. "Untangling corporate best practice for land use target setting, monitoring and disclosure". Presented at the [Land & Carbon Lab Summit 2023](#), 28 June 2023.
- Aljazeera, 2023. "[Brazil's President Lula unveils plan to end deforestation by 2030](#)".
- Andoh, Jewel, Kwame Antwi Oduro, Joowon Park and Yohan Lee, 2022. [Towards REDD+ Implementation: Deforestation and Forest Degradation Drivers, REDD+ Financing, and Readiness Activities in Participant Countries](#). *Frontiers in Forests and Global Change* 5.
- APRIL, 2023. "[Anderson Tanoto, Managing Director Of RGE, joined leading conservation stakeholders to discuss "who does what" in the implementation of the Global Biodiversity Framework \(GBF\) at the International Union For Conservation of Nature \(IUCN\) Leaders Forum 2023](#)".
- Argentina, Brazil, Bolivia, Colombia, Dominican Republic, Ecuador, Guatemala, Indonesia, Malaysia, Mexico, Nigeria, Paraguay, Peru, Thailand, Ghana, Ivory Coast and Honduras, 2023. Joint letter responding to EU DR (deforestation-free products). 7 September.
- Arts, Bas, Marleen Buizer, Lummina Horlings, Verina Ingram, Cora van Oosten and Paul Opdam, 2017. "[Landscape approaches: a state-of-the-art review](#)". *Annual Review of Environment and Resources* 42, 439–63.
- ASD (Action for Sustainable Derivatives), 2022. "[New fund of palm derivative users seeks to restore ecosystems and drive economic growth in Indonesia](#)".
- Azevedo, Andrea A., Raoni Rajao, Marcelo A. Costa, Marcelo C.C. Stabile, Marcia N. Macedo, Tiago N.P. dos Reis, Ane Alencar, Britaldo S. Soares-Filho, and Rayane Pacheco, 2016. "[Limits of Brazil's Forest Code as a means to end illegal deforestation](#)". *Proceedings of the National Academy of Sciences* 114 (29), 7653–58.
- Bager, Simon L. A and Eric F. Lambin, 2022. "[How do companies implement their zero-deforestation commitments](#)". *Journal of Cleaner Production* 375.
- Bappenas (Badan Perencanaan Pembangunan Nasional; Ministry of National Development Planning), 2022. [Sustainable Jurisdictions Indicators](#).
- Barreto, Paulo, Ritaumaria Pereira, Amintas Brandão Jr. and Sara Baima, 2017. [Will Meat-Packing Plants Help Halt Deforestation in the Amazon?](#) Imazon and Instituto Centro de Vida.
- Bellfield, Helen and Jolene Tan, 2023. "[A double espresso with no deforestation, please](#)".
- Bellfield, Helen, Osvaldo Pereira, Toby Gardner and Jane Siqueira Lino, 2023. [Risk Benchmarking for the EU Deforestation Regulation: Key Principles and Recommendations](#). Policy Brief. Trase and Proforest.
- Boyd, William, Claudia Stickler, Amy E. Duchelle, Frances Seymour, Daniel Nepstad, Nur H.A. Bahar and Dawn Rodriguez-Ward, 2018. [Jurisdictional Approaches to REDD+ and Low Emissions Development: Progress and Prospects](#). Working paper. Washington, DC: World Resources Institute.
- Busch, Jonah, Irene Ring, Monique Akullo, Oyut Amarjargal, Maud Borie, Rodrigo S. Cassola, Annabelle Cruz-Trinidad, Nils Droste, Joko Tri Haryanto, Ulan Kasymov, Natalia Viktorivna Kotenko, Ariunaa Lkhagvadorj, Felipe Luiz Lima De Paulo, Peter H. May, Anit Mukherjee, Sonny Mumbunan, Rui Santos, Luca Tacconi, Gracie Verde Selva, Madhu Verma, Xiaoxi Wang, Lu Yu and Kecen Zhou, 2021. "[A global review of ecological fiscal transfers](#)". *Nature Sustainability* 4, 756–65.
- CDP, n.d. "[The A list 2022](#)".
- CDP, 2023a. "[Assessing the credibility of disclosed corporate engagements in landscape and jurisdictional approaches](#)".
- CDP, 2023b. "[Meeting nature goals: landscape and jurisdictional approaches](#)".
- Centola, Damon, Joshua Becker, Devon Brackbill and Andrea Baronchelli, 2018. "[Experimental evidence for tipping points in social convention](#)". *Science* 360(6393).
- CGF (Consumer Goods Forum), 2010. "[Consumer goods industry announces initiatives on climate protection](#)". Press release.
- CGF FPCoA (Consumer Goods Forum Forest Positive Coalition of Action), 2021. [Strategy for Collective Action in Production Landscapes: Version 1.0](#).
- CGF FPCoA, 2022. [Collective Action and Investment in Landscape Initiatives: The Business Case for Forest Positive Transformation](#).
- CGF FPCoA, 2023. [Landscape Reporting Framework](#).
- Chain Reaction Research, 2021. [Key Cerrado Deforesters in 2020 Linked to the Clearing of More Than 110,000 Hectares](#).
- Chain Reaction Research, 2022. "[The Chain: Cargill and Bunge's links to contested farm in Brazil, human rights violations contradict upcoming EU regulations](#)".
- Chatham House, 2021 a. "[Resource Trade](#)".
- Chatham House, 2021 b. "[About](#)".

Climate Policy Initiative, 2022. [Landscape of Climate Finance for Agriculture, Forestry, Other Land Uses and Fisheries](#).

CLUA (Climate and Land Use Alliance), 2022. [Brazil Initiative 2018–2022](#).

Comparea, n.d. "[Comparea](#)".

Conservation International, Earth Innovation Institute, Earthworm Foundation, Emergent, IDH, ISEAL, LandScale, Proforest and Tropical Forest Alliance (TFA), 2023. [Joint Position on Beyond Value Chain Mitigation: Incentivising Corporate Action at Landscape and Jurisdictional Scale](#).

Conservation International, Emergent, EDF, IDH, ISEAL, Proforest and TFA, 2022. [Feedback on the Greenhouse Gas Protocol Draft Land Sector and Removal Guidance: Incentivising Corporate Action at Landscape and Jurisdictional Scale](#).

Convention on Biological Diversity, 2018. "[2.6 billion people draw their livelihoods from agriculture](#)".

CPOPC (Council of Palm Oil Producing Countries), 2023. [Briefing Paper: Implications of the EU Deforestation Regulation \(EUDR\) for Oil Palm Smallholders](#).

De Siqueira, Elisa, Maria Franceschini, Gabriela Grisolia, Marilu Milanez and Stephanie Nasuti S, 2017. "[The Rural Environmental Registry \(CAR\) – an opportunity for integrated environmental land management for traditional peoples and communities in Brazil?](#)" Paper prepared for presentation at the World Bank Conference on Land and Poverty, Washington, DC, March 20–24.

Earthworm, n.d. "[Our work in landscapes](#)".

Earthworm, 2023. "[Restoring forests and empowering communities in Côte d'Ivoire's cocoa industry](#)". Press release.

Elgar, Heather, 2023. *How do environmental disclosure norms influence why and how businesses engage in landscape approaches to ecological protection and restoration?* MSc dissertation for Centre for Alternative Technology.

Emergent, 2021. "[LEAF Coalition mobilizes \\$1 billion for tropical forest conservation](#)".

Essen, Marius von and Eric F. Lambin, 2021. "[Jurisdictional approaches to sustainable resource use](#)". *Frontiers in Ecology and the Environment* 19(3), 159–67.

European Commission, n.d. a. "[Corporate sustainability due diligence](#)".

European Commission, n.d. b. "[Corporate sustainability reporting](#)".

European Commission, n.d. c. "[Deforestation-free products](#)".

European Commission, n.d. d. "[The European green deal](#)".

European Commission, 2019. "[EU Communication \(2019\) on stepping up EU action to protect and restore the world's forests](#)".

European Commission, 2023. "[Frequently asked questions - deforestation regulation](#)".

FAO (Food and Agriculture Organization of the United Nations), 2022. [FAO Remote Sensing Survey Reveals Tropical Rainforests Under Pressure as Agricultural Expansion Drives Global Deforestation](#). Rome: FAO.

FAO, 2023. "[Forestry production and trade](#)".

Fauzi, Dimas, 2022. "[Three challenges of smallholder inclusion in sustainable agriculture traceability](#)". Press release.

Federative Republic of Brazil, 2022. [Nationally Determined Contribution](#).

Fern, 2023a. "[EU Deforestation Regulation: smallholders hope that help is on its way](#)".

Fern, 2023b. [An EU Strategic Framework for Working with Countries to Achieve Deforestation-Free Production: Why It Is Needed, and What It Could Look Like](#).

Fishman, Akiva, Edegar Oliveira, and Lloyd Gamble. 2017. [Tackling deforestation through a jurisdictional approach: lessons from the field](#). WWF.

FOLUR, n.d. "[About us](#)".

Forest500, n.d. "[Company rankings](#)".

Forests and Finance, n.d. "[TNFD, the Taskforce on Nature-Related Financial Disclosures](#)".

Gardner, T.A., M. Benzie, J. Börner, E. Dawkins, S. Fick, R. Garrett, J. Godar, A. Grimard, S. Lake, R.K. Larsen, N. Mardas, C.L. McDermott, P. Meyfroidt, M. Osbeck, M. Persson, T. Sembres, C. Suavet, B. Strassburg, A. Trevisan, C. West and P. Wolvekamp, 2019. "[Transparency and sustainability in global commodity supply chains](#)". *World Development* 121, 162–77.

GCF TF (Governors' Climate & Forests Task Force), n.d. a. "[Member states](#)".

GCF TF n.d. b. "[Jurisdictional strategies & investment plans](#)".

Geijer, Thijs, 2023. "[Food companies under pressure to source deforestation-free products under new EU law](#)".

Griscom, Bronson W., Justin Adams, Peter W. Ellis and Joseph Fargione, 2017. "[Natural climate solutions](#)". *Earth, Atmospheric, and Planetary Sciences* 114(44), 11,645–50.

Government of Siak, 2022. [Commodity, Conservation, and Community Collaboration: Siak, Riau, Jurisdictional Investment Outlook 2022](#).

GTFI (Grupo de Trabalhos dos Fornecedores Indiretos; Indirect Supplier Working Group), 2023. "[Selo Verde](#)".

Guerino, Ritielly Maria Guimaraes, Isa Lucia de Moraes, Aline Bezerra da Silva Santos and Renata Martins Campos, 2022. "[Expansion and socio-environmental impacts of the culture of eucalyptus spp. \(Myrtaceae\) in Brazil: a literature panorama](#)". *Research, Society and Development* 11 (3).

HCV Network, n.d. "[HCV approach](#)".

Heilmayr, Robert, Cristian Echeverría, Rodrigo Fuentes and Eric F. Lambin, 2016. "[A plantation-dominated forest transition in Chile](#)". *Applied Geography* 75(14), 71–82.

Heilmayr, Robert, Lisa L. Rausch, Jacob Munger and Holly K. Gibbs, 2020. "[Brazil's Amazon soy moratorium reduced deforestation](#)".

Nature Food 1, 801–10.

Hill, Andrew, 2021. "[Executive pay and climate: can bonuses be used to reduce emissions?](#)"

ICCO (International Cocoa Organization), 2022. *Quarterly Bulletin of Cocoa Statistics, cocoa year 2021/2022*.

IDH, n.d. "[Landscapes](#)".

Idle, Tom, 2023. "[Smallholder farmers and the challenges of EUDR compliance](#)". Innovation Forum.

Indonesia Ministry of Agriculture, 2020. [Penyelenggaraan Sertifikasi Perkebunan Kelapa Sawit Berkelanjutan Indonesia \(Ministry of Agriculture Decree No. 38/2020 on Implementation of Indonesian Sustainable Palm Oil Plantation Certification\)](#).

BKPM (Badan Koordinasi Penanaman Modal), 2022. [Sustainable Investment Guideline](#).

International Trade Centre, 2022. [The State of Sustainable Markets 2022, Statistics and Emerging Trends](#). Geneva, Switzerland: International Trade Centre.

IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), n.d. "[Policy instrument: ecological fiscal transfers](#)".

ISEAL (International Social and Environmental Accreditation and Labelling Alliance), n.d. "[Joint landscapes position papers \(2022/2023\)](#)".

ISEAL, 2019. [Introduction to Sustainability Benchmarking](#).

ISEAL, 2022. [What Constitutes a Company Landscape Investment or Action?](#) Landscape and Jurisdictional Practitioner Community – Joint Position Paper.

ISEAL, 2023a. [Effective Company Claims About Landscape Investments and Actions](#).

ISEAL, 2023b. [Effective Company Claims About Contributions to Landscape Performance Outcomes](#).

ISEAL, Proforest, TFA and WWF (World Wide Fund for Nature), 2021. "[How jurisdictional approaches work](#)".

Jordan, Lucy, Alice Ross, Elisangela Mendonca, Andrew Wasley and Liam Slattery, 2022. "[‘Loophole’ allowing for deforestation on soya farms in Brazil’s Amazon](#)". *Guardian*.

Kalischek, Nikolai, Nico Lang, Cécile Renier, Rodrigo Caye Daudt, Thomas Addoah, William Thompson, Wilma J. Blaser-Hart, Rachael Garrett, Konrad Schindler and Jan D. Wegner, 2023. "[Cocoa plantations are associated with deforestation in Côte d’Ivoire and Ghana](#)". *Nature Food* 4, 384–93.

Koch, Richard, 2011. [The 80/20 Principle: The Secret of Achieving More with Less: Updated 20th Anniversary Edition of the Productivity and Business Classic](#).

LandScale, n.d. "[Measuring performance, powering sustainability](#)".

Landscapes for People, Food and Nature, n.d. "[Integrated landscape management](#)".

LEAF Coalition, n.d. "[Uniting to protect tropical forests. For climate, people & nature](#)".

LTKL (Lingkar Temu Kabupaten Lestari), n.d. "[Partners](#)".

LTKL, 2022. [Lingkar Temu Kabupaten Lestari Laporan Tahunan 2021/2022](#).

LTKL, 2023. [Lingkar Temu Kabupaten Lestari: Annual Report 2022-2023](#).

Mano, Ana, 2019. "[Exclusive: Brazil prosecutors push soy, cattle moratorium to protect natives](#)". Reuters.

McKinsey Sustainability, 2022. "[Where the world’s largest companies stand on nature](#)".

Ministry of Food and Agriculture, Republic of Ghana/Essegbey, George Owusu, Delali Nutsukpo, Naaminong Karbo and Robert Zougmore, 2015. [National Climate-Smart Agriculture and Food Security Action Plan of Ghana \(2016-2020\)](#). Working Paper No. 139. CCAFS (Climate Change, Agriculture and Food Security).

Molenaar, J.W., J. Gorter, L. Heilbron, L. Simons, B. Vorley, E. Blackmore and J Dallinger, 2015. [Sustainable Sector Transformation: How to drive sustainability performance in smallholder-dominated agricultural sectors?](#) White Paper 1. Aidenenvironment, NewForesight and IIED. Commissioned by IFC.

Morris, Belinda, 2017. *Transforming the Palm Oil Sector in Conservation, Science and Land Use*. California: David & Lucile Packard Foundation.

Murasa, Sandra Uwera, 2023. "[EU ponders groundbreaking rules to help smallholder farmers](#)". Voxeurop.

Musim Mas, 2020. "[Musim Mas and General Mills collaborate to build smallholder extension services in Aceh’s Leuser Ecosystem](#)".

Musim Mas, 2021. "[Musim Mas partners with AAK and Nestlé to address deforestation outside of concession areas](#)".

NDC Partnership, n.d. "[Implementing prevention and control policies for reducing deforestation](#)".

Nepstad, Daniel, Silvia Irawan, Tathiana Bezerra, William Boyd, Claudia Stickler, Joao Shimada, Oswaldo Carvalho, Katie MacIntyre, Alue Dohong, Ane Alencar, Andrea Azevedo, David Tepper and Sarah Lowery, 2013. [More Food, More Forests, Fewer Emissions, Better Livelihoods: Linking REDD+, Sustainable Supply Chains and Domestic Policy in Brazil, Indonesia and Colombia](#). *Carbon Management* 4(6), 639–58.

Nusantara Atlas, 2023. "[Pulp-and-paper driven deforestation in Indonesia accelerates in 2022](#)".

NYDF (New York Declaration on Forests), n.d. "[Who are the NYDF endorsers?](#)"

NYDF, 2014. [New York Declaration on Forests](#).

OEC (Observatory of Economic Complexity), 2022. "[Cocoa beans](#)".

OECD (Organisation for Economic Co-operation and Development), 2019. [Levelling the Playing Field](#).

OECD, 2020. [Policy Strategies and Challenges for Climate Change Mitigation in the Agriculture, Forestry and Other Land Use \(AFOLU\) Sector](#).

Otto, Ilona M., Jonathan F. Donges, Roger Cremades, Avit Bhowmik, Richard J. Hewitt, Wolfgang Lucht, Johan Rockström, Franziska Allersberger, Mark McCaffrey, Sylvanus S. P. Doe, Alex Lenferna, Nerea Morán, Detlef P. van Vuuren and Hans Joachim Schellnhuber, 2020. [“Social tipping dynamics for stabilizing Earth’s climate by 2050”](#). PNAS 117(5).

Our World in Data, n.d. [“Share of GDP from agriculture 1960–2021”](#).

Palmer, Blair, Dyah Puspitaloka, Fenneke Brascamp, Ginny Ng and Gary Paoli, 2023. [Jurisdictional Approaches in Indonesia: Progress, Challenges and Lessons](#). Daemeter.

PCI Institute, 2022. [PCI Pathways: Produce, Conserve and Include Strategy from 2015 to 2022, Advances in the Largest Jurisdictional Sustainability Initiative in the Country](#).

Preferred by Nature, n.d. [“Brazil soy risk profile”](#).

President of Indonesia, 2018. [Presidential Instruction No. 8/2018 on postponement and evaluation of permits for oil palm plantations and increased productivity for oil palm plantations](#).

President of Indonesia, 2019a. [Presidential Instruction No. 5/2019 on termination of granting of new permits and improvement of governance of primary natural forest and peatland](#).

President of Indonesia, 2019b. [Presidential Instruction No. 6/2019 on National Action Plan for Sustainable Palm Oil 2019–2024](#).

Proforest, 2017. [Delivering Company Commitments to Zero Deforestation Commodity Supply Chains](#).

Proforest, 2020. [Engaging with Landscape Initiatives: A Practical Guide for Supply Chain Companies](#).

Proforest, 2022. [EU Regulation on Deforestation-Free Products: Operational Guidance for Cocoa Producers and Importers](#).

Ranganathan, Janet, Richard Waite, Tim Searchinger and Craig Hanson, 2018. [“How to sustainably feed 10 billion people by 2050, in 21 charts”](#).

Rausch, Lisa, 2021. [“Case study: Brazil’s Amazon soy moratorium”](#).

Reed, James, Liz Deakin, and Terry Sunderland. 2015. [“What are ‘integrated landscape approaches’ and how effectively have they been implemented in the tropics: a systematic map protocol”](#). *Environmental Evidence* 4.

Reed, James, Josh Van Vianen, Elizabeth L. Deakin, Jos Barlow and Terry Sunderland, 2016. [“Integrated landscape approaches to managing social and environmental issues in the tropics: learning from the past to guide the future”](#). *Global Change Biology* 22(7), 2540–54.

REM MT (REDD+ Early Movers Program Mato Grosso), n.d. [“O REM MT”](#).

Republic of Indonesia, 2022. [Enhanced Nationally Determined Contributions](#).

Republic of Ghana, 2016. [Ghana REDD+ Strategy](#).

Republic of Ghana, 2021. [Updated Nationally Determined Contribution under the Paris Agreement \(2020–2030\)](#).

Richens, James, 2023. [“Doubts over legal compliance put Brazil’s soy exports to the EU at risk”](#). Trase Insights.

RSPO (Roundtable on Sustainable Palm Oil), 2017. [“Ecuador takes giant step towards certified sustainable palm oil production”](#).

RSPO, 2022. [Impact Report 2022](#).

Salas, Christian, Pablo J. Donoso, Rodrigo Vargas, Cesar A. Arriagada, Rodrigo Pedraza and Daniel P. Soto, 2016. [“The forest sector in Chile: an overview and current challenges”](#). *Journal of Forestry* 114(5), 562–71.

Samberg, Leah, Marco Daldoss Pirri and Craig Beatty, 2023. [“SBTN’s No Conversion Target builds on the Accountability Framework”](#).

SBTi (Science Based Targets Initiative), n.d. [“FAQs”](#).

SBTi, 2022a. [“Companies taking action”](#).

SBTi, 2022b. [“Going above and beyond to contribute to societal net-zero”](#).

SBTi, 2023. [Science Based Targets Initiative Public Consultation on Beyond Value Chain Mitigation \(BVCM\)](#).

SBTi, n.d. [“FAQs”](#).

SBTi and WWF, n.d. [Forest, Land and Agriculture Science Based Target-setting Guidance](#).

SBTN (Science Based Targets Network), n.d. [“Public consultation for the first land science-based targets”](#).

SBTN, 2023. [Science Based Targets for Land Version 0.3](#).

SECO (State Secretariat for Economic Affairs), 2023. [SECO’s Engagement in Sustainable Landscape Approaches, Beyond a Single Crop Focus](#).

Seymour, Frances, 2014. Reducing Emissions from Oil Palm Cultivation in Indonesia: A Strategy for the David and Lucile Packard Foundation and the Climate and Land Use Alliance.

Seymour, Frances, 2017. [“Corporate commitments: necessary but not sufficient to end tropical deforestation”](#).

Seymour, Frances, Leony Aurora and Joko Arif, 2020. [“The jurisdictional approach in Indonesia: incentives, actions, and facilitating connections”](#). *Frontiers in Forests and Global Change*.

Seymour, Frances, Michael Wolosin and Erin Gray, 2022. [“Not just carbon: capturing all the benefits of forests for stabilizing the climate from local to global scales”](#).

Shames, Seth, 2023. [“Dialogue 2: financial mechanisms for landscape investment synergies to increase returns, reduce risks and enhance impacts”](#). Landscapes for 1 Billion People, 26 April.

SIM (Sustainable Investment Management), 2023. [“RCF expanded with investment by Rabobank, Santander and AGR13”](#).

SourceUp, n.d. [“How it works, for producing regions”](#).

Spencer, Matthew, 2023a. [European Deforestation Regulation Key Opportunities and Risks](#). IDH.

Spencer, Matthew, 2023b. [“Despite the EU deforestation regulation, companies are investing more in palm oil. Why?”](#).

SPLP (Siak Pelalawan Landscape Programme), n.d. [“Siak Pelalawan Landscape Programme”](#).

Stickler, Claudia, Maria DiGiano, David McGrath, Daniel Nepstad, Briana Swette, Charlotta Chan and Max McGrath-Horn, 2014. [Fostering Low-Emission Rural Development from the Ground Up](#).

Stickler, Claudia, Amy Duchelle, Juan Pablo Ardila, Daniel Nepstad, Olivia David, Charlotta Chan, Juan Gabriel Rojas, Rafael Vargas, Tathiana Bezerra, Luke Pritchard, Julie Simmonds, Joanna Durbin, Gabriela Simonet, Swetha Peteru, Mella Komalasari, Maria DiGiano and Matt Warren, 2018. [The State of Jurisdictional Sustainability: Synthesis for Practitioners and Policy Makers](#). San Francisco, CA: Earth Innovation Institute/Bogor, Indonesia: Center for International Forestry Research/Boulder, CO: GCF Task Force.

Suroyo, Gayatri and Bernadette Christina, 2021. [“Explainer: what next after Indonesia ends freeze on palm permits?”](#).

Taylor, Rod and Charlotte Streck, 2018. [The Elusive Impact of the Deforestation-Free Supply Chain Movement](#). Washington, Washington, DC: World Resources Institute.

Tesco, 2022. [“Zero-deforestation soy initiative underway with major UK supermarket backing”](#).

TFA (Tropical Forest Alliance), n.d. a. [“Jurisdictional Action Network”](#).

TFA, n.d. b. [“Investor Policy Dialogue on Deforestation \(IPDD\) initiative”](#).

TFA, n.d. c. [“IFACC”](#).

TFA, 2021. [Jurisdictional Approach to Sustainability: Lessons Learnt from Private Sector Action in Aceh Tamiang, Indonesia](#).

TFA and Proforest, 2023. [Accelerating Progress for Nature, Climate and People at Scale: Companies’ Roles and Action](#).

TFA, Proforest and CDP, 2023a. [Company Landscape Engagement for Cocoa Sustainability: Progress and the Path Forward](#).

TFA, Proforest and CDP, 2023b. [Beyond Supply Chains: Pulp, Paper and Packaging Companies Take Landscape Action for Sustainability at Scale](#).

TFA, Proforest and CDP, 2023c. [Sharing Responsibility and Success: Companies Collaborate to Support Palm Oil Landscapes](#).

TFA, Proforest and CDP, 2023d. [Starting the Journey: Companies Collaborate for Beef Sustainability at Scale](#).

TFA, Proforest and CDP, 2023e. [Companies Collaborating for Sustainable Soy Landscapes: Progress and Transition Pathways](#). (Report forthcoming)

TFA, Rights and Advocacy Initiatives Network and Proforest, 2022. [Leadership in Production Landscapes: Collective Private Sector Action in Asunafo-Asutifi, Ghana](#).

TFA, WWF and Proforest, 2020. [Landscape Scale Action for Forests, People and Sustainable Production](#).

TNC (The Nature Conservancy), 2017. [“Nature’s make or break potential for climate change”](#).

TNFD (Taskforce for Nature-related Financial Disclosures), 2023a. [“Guidance on the identification and assessment of nature-related issues: the LEAP approach”](#).

TNFD, 2023b. [“Taskforce on Nature-related Financial Disclosures \(TNFD\) recommendations”](#).

TNFD, 2023c. [Guidance on Engagement with Indigenous Peoples, Local Communities and Affected Stakeholders](#).

Tuppura, Anni, Anne Toppinen and Kaisu Puumalainen, 2015. [“Forest certification and ISO 14001: current state and motivation in forest companies”](#). *Business Strategy and the Environment* 25(5), 355–68.

UNEP (United Nations Environment Programme), The Nature Conservancy and TFA, 2023. [IFACC 2022 Market Report](#).

UNEP, 2022. [“COP 15 ends with landmark biodiversity agreement”](#).

UNEP FI (United Nations Environment Programme Finance Initiative), 2022. [Equitable, Net Zero & Nature Positive Finance, Accelerating Private Investment in Sustainable Land Use](#).

UNFCCC (United Nations Framework Convention on Climate Change), n.d. [“The Paris Agreement”](#).

UNFSS (United Nations Forum on Sustainability Standards), 2022. [Voluntary Sustainability Standards: Sustainability Agenda and Developing Countries: Opportunities and Challenges](#).

Unilever, 2022a. [Reimagining Landscapes: How Unilever is Helping to Make Sustainable Living Commonplace in Palm Oil Production Landscapes](#).

Unilever, 2022b. [“Using crowdsourcing for a more transparent palm oil supply chain”](#).

United Nations, n.d. [“All about the NDCs”](#).

Vasconcelos, André, Felipe Cerignoni, Vinicius Silgueiro, Tiago Reis, Ana Valdiones and Marcondes Coelho, 2023. [Soy and Legal Compliance in Brazil: Risks and Opportunities under the EU Deforestation Regulation](#). Policy Brief. Trase and Instituto Centro De Vida.

WCF (World Cocoa Foundation), n.d. [“Cocoa & Forests Initiative”](#).

Weisse, Mikaela and Elizabeth Goldman, 2021. [“Just 7 commodities replaced an area of forest twice the size of Germany between 2001 and 2015”](#).

World Bank, 2012. [Inclusive Green Growth: The Pathway to Sustainable Development](#).

World Bank, 2023. [“Agriculture and food”](#).

WEF (World Economic Forum), 2023. [“This new framework helps companies set science based targets for nature”](#).

WTO (World Trade Organization), 2023. [“WTO members review farm policies, discuss food security, agri-food system resilience”](#).

WWF (World Wide Fund for Nature), n.d. [“Forests Forward”](#).

WWF, 2021. [Palm Oil Buyers Scorecard: Measuring the Progress of Palm Oil Buyers as We Kick Off a Decade of Action for Nature](#).



ABOUT TROPICAL FOREST ALLIANCE

The Tropical Forest Alliance is a multi-stakeholder partnership platform initiated to support the implementation of private sector commitments to remove deforestation from palm oil, beef, soy, cocoa and pulp and paper supply chains. Hosted by the World Economic Forum, our 170+ alliance partners include companies, government entities, civil society, Indigenous Peoples, local communities and international organizations. With our partners, TFA works to mobilize collective action to advance the world's transition to deforestation-free commodity production. TFA hosts and manages the Jurisdictional Action Network of 2,200+ proponents of landscape and jurisdictional approaches to achieve sustainability at scale and the [JA Resource Hub](#). Visit www.tropicalforestalliance.org.