



DISCUSSION
PAPER

2016

WWF DISCUSSION PAPER: JURISDICTIONAL APPROACHES TO ZERO DEFORESTATION COMMODITIES

NOVEMBER 2016



This discussion paper was prepared by Michael Wolosin of Forest Climate Analytics on behalf of WWF US with input from WWF network and external experts. It provides information and analysis for consideration by interested stakeholders and to promote additional discussion. It does not represent a policy position of WWF.

TABLE OF CONTENTS

Executive Summary	3
1. Introduction	5
Approach to this analysis	6
2. Mapping of Jurisdictional Approaches	6
A suite of related strategies	6
Jurisdictional approaches to ZDCs as emerging strategy	7
Examples of JA-ZDC and “near-JA-ZDC” programs and initiatives	10
Inventory of jurisdictional approaches to ZDCs	13
3. Observations on whether and when JA-ZDCs are a Promising Strategy	19
Looking ahead at some key issues	20
Appendix 1: Bibliography	21

EXECUTIVE SUMMARY

Increasing numbers of governments, foundations, NGOs, and companies are looking to jurisdictional scale approaches as a way to help deliver sustainable and deforestation-free agricultural commodities.

These approaches lie at the intersection of three existing strategies to reduce forest loss and degradation along with improving the health and sustainability of rural and frontier economies. Landscape approaches, which have been maturing in the context of conservation, natural resource management, and REDD+ efforts, are marked most notably by the engagement of stakeholders across sectors working together to reconcile competing land use objectives. Jurisdictional approaches are similar but take place at a scale that matches the administrative boundaries of primarily sub-national governments, and have been a major emphasis in the development of REDD+. Finally, voluntary corporate sustainability efforts by the industries that typically drive deforestation bring decades of experience in certification approaches, and have recently been led by a wave of companies and industry groups pledging to eliminate deforestation from their supply chains. These three strategies are increasingly converging.

In mapping the landscape of why, where, who, and how the community is approaching this convergence, we find that:

- **The conversation is still in early days.** Progress ranges from the concept and agenda-setting to project planning phases and efforts to align stakeholders around defined approaches in specific places. The most mature examples are buildouts from programs that were already in development (e.g., bringing producers into existing jurisdictional REDD+ processes or expanding commodity certification approaches to jurisdictional scales); however, even these are relatively nascent.
- **Driving motivations vary by stakeholder group** and their experience with each of the three broader strategic approaches. Among agricultural commodity companies and those supporting their zero-deforestation commitments (ZDCs), the biggest driver is a growing perception that certification approaches will not achieve the desired outcomes unless they are scaled-up and include governments as leading stakeholders. Among forest and REDD+ proponents, there is a hope that scaling up supply chain approaches to jurisdictions will provide additional incentives, both ex ante and ex post to forest country policy makers.
- **There are a few dozen examples of initiatives with elements of jurisdictional approaches to zero deforestation commodities (JA-ZDC).** We identified more than 25 distinct geographies where elements of “JA-ZDCs” are being explored. The [jurisdictional sourcing commitment](#) announced in 2015 at the Paris UNFCCC conference by Marks & Spencer and Unilever includes a preliminary vision of a jurisdictional sourcing strategy with a global market signal for sustainable jurisdictions. Other notable platforms include the [Forests, Farms, and Finance Initiative](#) led by Earth Innovation Institute, including its Territorial Performance System, the World Bank Biocarbon Fund’s [Initiative for Sustainable Forest Landscapes \(ISFL\)](#), and [Jurisdictional RSPO](#) which is less developed but very relevant. Specific jurisdictions are advancing through each of these platforms; Mato Grosso, Brazil appears farthest along of any. Leading global organizations in the space include [EII](#), the [Sustainable Trade Initiative \(IDH\)](#), and [The Nature Conservancy](#).
- **The most notable commonality is difference.** Each initiative is uniquely tailored to the particular government, commodities, communities, and challenges of the jurisdiction.

More than twenty-five interviews of thought leaders in this space suggest a mix of enthusiasm and caution. About a quarter of interviewees were enthusiastic about the potential for this new convergence to speed progress at decoupling production and deforestation. A similar proportion ranged from concerned to critical. For example, several interviewees suggested that jurisdictional approaches to supply chain commitments are just the latest fashion and may represent a “bubble.” The majority of interviewees, however, were somewhere between these extremes, recognizing both opportunities and challenges in the approach. Among many of these “middle-ground” interviewees, there was less enthusiasm for top-down or “one-size-fits-all” strategies of advancing commitments to preferentially source from engaged or high-performing jurisdictions than for the broader concept of convergence between jurisdictional approaches and supply chain actions.

The most important and promising element of these initiatives so far has been the opportunity to drive dialogue and convergence of common goals across business, government, and community stakeholders. With governance, planning and enforcement repeatedly identified as both critical and limiting factors, this opportunity for dialogue and convergence is most valuable because it can redirect, focus, and/or energize governments. For example, Mato Grosso, Brazil is participating in and pursuing various sustainable rural development programs sponsored by the state, the national government, and by international donors – one analysis identified at least eight different definitions of success in terms of deforestation across these programs. By bringing jurisdictional approaches from REDD+ and from local government regulation together with commodity sustainability processes, stakeholders were able to converge on a more unified set of goals, milestones, and monitoring approaches, creating local government and community buy-in and many other opportunities in the process.

One of the biggest strategic challenges is the definition of success – and who gets to decide. Demand side consumer companies and traders have dominated the recent wave of zero-deforestation commitments, with producers often at the receiving end of mandates. Top-down definitions of success can reduce the opportunity for dialogue and the willingness of both producers and their local governments to engage. Negative responses by some leaders in the Indonesian government to zero deforestation palm oil commitments are a prime example. Having been omitted from the process, forces for business-as-usual development within both national and local governments re-framed the commitments as a form of neo-colonialism.

We concluded that the key strategic questions for NGO stakeholders are:

- *How can they best drive additional engagement and investment from the private sector – and in particular from producers – in better governance of forested rural landscapes?*
- *What combined incentives will be adequate to bring government to the table toward this same objective?*
- *And how can public and private sector actors best engage multi-stakeholder processes to yield targets and milestones that are sufficiently ambitious?*

1. INTRODUCTION

It has been nearly a decade since REDD+ was introduced in the UNFCCC negotiations as a global transfer mechanism for developed countries to support emissions reductions from forest loss in developing countries. In this time, the vision of how global climate cooperation can reduce emissions in developing countries has sharpened considerably.

Three trends are notable. First, a recognition that governments are both necessary and insufficient to achieve a global emissions transformation has led to an expansion of climate cooperation to include additional stakeholders across sectors – most notably from the business and investment spheres. In the forest and land use sector, this is manifesting primarily as voluntary zero-deforestation commitments from corporate commodity companies and their financiers.

Second, the “aid-ification” of climate finance has shifted the paradigm for north-to-south climate transfers from one of compensation to one of development and “green growth.” In the forest and land use sector, this has led to work linking deforestation reduction efforts to agricultural intensification as an alternative to extensification.

And third, on-the-ground experience has taught REDD+ practitioners that they must address both the systemic rights, enforcement, and planning challenges that are the responsibility of governments as well as the drivers of deforestation that are dominated by private sector demand for agricultural land. This is leading to a focus on landscapes and large sub-national administrative jurisdictions where the spatial scale is sufficient to reduce concerns of leakage and at the same time, the primary drivers of deforestation are consolidated enough to address effectively through a limited number of levers. In the case of jurisdictions but not necessarily landscapes, governments are presumed to be sufficiently engaged, accountable and powerful to act effectively or to have the potential to reach this state of effectiveness.

Together, these three trends – expansion of climate responsibility to the private sector, demand that climate action be pro-development, and landscape or jurisdictional scale REDD+ (J-REDD) – have led to the emergence of efforts to implement “produce and protect” approaches at the jurisdictional level, supported by governments through REDD+ and by the private sector through zero-deforestation sourcing commitments (ZDCs).

While there are clear complementarities, some are also seeing a mismatch between J-REDD and ZDCs. The current implementation of zero-deforestation commitments is on track to provide farm- or plantation-level incentives rather than jurisdictional incentives. If markets bifurcate with some buyers procuring deforestation-free goods for those who care, and others procuring the products of continuing deforestation and selling to second-tier markets, then commodity deforestation leakage will have undermined ZDCs and exposed even the “good” companies to major risks. Some traders and consumer companies are also increasingly concerned about securing the quantity of zero-deforestation commodities they will need – and are recognizing that the scale of demand will ultimately require landscape-scale planning and effective governance rather than certification of just a fraction of farms. To avoid deforestation leakage and to engage governments in scaling up sustainable production, consumer companies, commodity traders, producers groups, and those supporting industry sustainability goals are now exploring the same transition to jurisdictional scale action that REDD+ has made.

This exploration of jurisdictional approaches to supply chain sustainability is advancing rapidly. A wide range of NGOs, governments, and companies are engaging in a complex array of individual and multi-stakeholder initiatives. Many of these efforts are in early stages and many are not yet public.

This report was produced to create an up-to-date landscape map of initiatives on jurisdictional approaches to achieving deforestation-free commodity supply chains and to provide a preliminary assessment of the distinctions among these approaches and their relative strategic potential. A key challenge going forward will be for leaders from government, private sector, civil society and Indigenous Peoples to have some common understanding of the state-of-play and terminology from which to discuss the advantages, risks and lessons learned from different models, and this report is intended to generate and support further critical discussion.

APPROACH TO THIS ANALYSIS

This report is substantially based on interviews, conducted between March and May 2016, with approximately thirty experts in REDD+, jurisdictional approaches, and sustainable supply chains from a range of sectors. Interviewees were assured that comments would not be attributed to individuals. Interviews were not formally structured, but rather sought to draw out the knowledge, experience, and insights from each individual or group. Desk research, including review of websites, blogs, news articles, and both public and confidential documents as available, added to information derived from interviews. An abbreviated bibliography is included in Appendix 1.

2. MAPPING OF JURISDICTIONAL APPROACHES

A SUITE OF RELATED STRATEGIES

Three related strategies seeking to reduce forest loss and degradation while improving the health and sustainability of rural and frontier economies are increasingly converging.

Landscape approaches, which have been maturing in the context of conservation, natural resource management, and REDD+ efforts for decades, are marked most notably by the engagement of stakeholders across sectors working together to reconcile competing land use objectives. The [Little Sustainable Landscapes Book](#) (Denier et al., 2015) defines a landscape approach as:

“a conceptual framework whereby stakeholders in a landscape aim to reconcile competing social, economic and environmental objectives. It seeks to move away from the often-unsustainable sectoral approach to land management. A landscape approach aims to ensure the realization of local level needs and action (i.e. the interests of different stakeholders within the landscape), while also considering goals and outcomes important to stakeholders outside the landscape, such as national governments or the international community.”

A landscape approach undertaken through a collaborative, multi-stakeholder process is “integrated landscape management.” There is a growing literature of case studies and analyses of the practice and opportunities presented by landscape approaches and integrated landscape management, including – recently – the application of such approaches to sustainable sourcing of agricultural commodities (e.g., Kissinger et al. 2013).

Jurisdictional approaches are similar but take place at a scale that matches the administrative boundaries of sub-national or national governments, and have been a major emphasis in the development of REDD+. While some sources suggest that jurisdictional approaches are a subset of landscape approaches (e.g., Denier et al. 2015), a jurisdictional program that addresses only a single-sector, is more top-down than multi-stakeholder in nature, or that focuses on a single objective (like emissions) rather than on multiple competing objectives (including incomes) would lie outside the boundary of most definitions of landscape approaches.

In the context of REDD+, the UNFCCC requires several program elements – including reference levels of forest-related emissions – to be at national or jurisdictional scale. The number of program pipelines for jurisdictional-REDD+, and the number of jurisdictions [progressing](#) through them, are both increasing. For example, states and provinces are an organizing principle for the [Governor’s Climate and Forest Task Force](#). The [FCPF-Carbon Fund](#), [REDD Early Movers](#), and the BioCarbon Fund’s [Initiative for Sustainable Forest Landscapes](#) are supporting large-scale programs that are jurisdictional at a minimum in the sense that they are priorities of national governments, and mostly align with subnational jurisdictions or other government-defined management areas. By last count, these pipelines include the participation of over 40 forest-country states and provinces in subnational REDD+ approaches.

Voluntary corporate sustainability efforts by the industries that typically drive deforestation bring along decades of experience in certification approaches. A particular subset of these efforts – zero-deforestation commitments – has expanded dramatically over the past few years, reaching over 100 companies making **zero deforestation commitments** for their procurement of palm, timber, cattle, soy, or multiple commodities in 2014 alone (Streck and Lee, 2016, data from supply-change.org). Companies have many reasons for making

these commitments, but NGO campaigns have been a primary driver for more than a decade and continue to play a role.

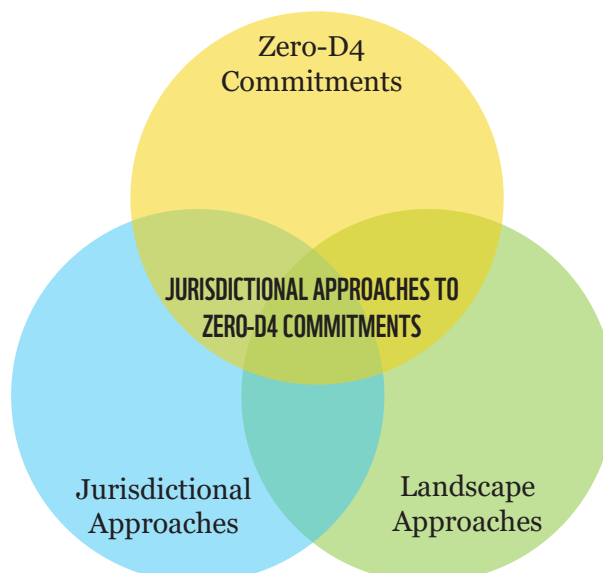
Companies are implementing these zero deforestation commitments in steps: tracing their purchases from ports back to mills, grain terminals, or slaughterhouses and ultimately to farms and plantations; working with suppliers, purchasers, NGOs, and other stakeholders to make definitions of “deforestation” operational, e.g., with “high conservation value” or “high carbon stock” delineation and cutoffs; and ultimately requiring that their suppliers provide commodities that meet deforestation-free standards at the level of farms and plantations.

JURISDICTIONAL APPROACHES TO ZDCs AS EMERGING STRATEGY

An archetypal **jurisdictional approach to zero deforestation commitments** (JA-ZDC) would lie at the intersection of these three strategies (Figure 1), incorporating key elements of all three. Elements of JA-ZDCs would include:

- Wall-to-wall agenda
- Geography relevant to policy
- Active participation by jurisdictional governments
- Recognition of and attempts to reconcile competing social, economic and environmental objectives
- Multi-stakeholder participation
- Multi-sectoral participation and objectives
- Active engagement by commodity purchasers outside the jurisdiction
- Regionally defined objectives
- Monitoring progress at the jurisdictional scale
- Zero-deforestation goal
- Preferential sourcing based on jurisdictional progress

Figure 1 – Intersection of three strategies



The latter of these elements are rarely all present in a single program. **Jurisdictional approaches to addressing supply chain deforestation** or **jurisdictional approaches to supply chain sustainability** are more general categories than JA-ZDCs, suggesting that goals do not necessarily include zero-deforestation or that forest loss is not the sole or primary definition of sustainability. In a **jurisdictional sourcing approach** companies assess accountability for meeting their goals at the jurisdictional scale, perhaps including **jurisdictional certification** (certifying all production from a jurisdiction as meeting a standard if jurisdictional-scale performance criteria are met), and they **preferentially source** products based at least in part on the presence and success of place-based jurisdictional approaches.

A range of factors is driving interest in this convergence. Based on interviews of stakeholders and other research, the following factors were most prominent.

Among companies and those supporting supply-chain approaches to deforestation reduction, a primary driver is the perception that certification approaches will not achieve the desired outcomes on their own, quickly enough or at all.

This is partly a scale issue. Companies recognize the risk that they could achieve zero deforestation among all of the individual production units at the base of their supply chains, but still fail to achieve broader sustainability of their entire industries. This could expose companies to reputational risk by association (e.g., consumers could turn away from palm oil entirely rather than seeking out sustainable sources), or to more existential risks if degrading ecosystems can no longer generate the raw materials their businesses demand in the future. More directly to the point for some is the sense that they could succeed in their own supply chains but still ultimately fail to slow or stop forest loss.

Companies also increasingly recognize that scaling up sustainable commodities – and achieving sustainability outside the boundaries of any particular company’s direct supply lines – will require the full participation of governments. The reasons are well-documented (see e.g., Streck and Lee 2016, Daemeter nd., EII 2016, Mallet et al 2016) and include a need for land use planning and clear tenure, for policy frameworks that support sustainability, for effective enforcement of laws and regulation, and for the protection and support of smallholders and communities to ensure that benefits of rural development are inclusive and sustainability is not too costly. Governments are no longer seen as just a stumbling block for companies. Rather, it is understood now that if market drivers and real economic incentives and/or consequences can be brought to bear on governments, they can use the wide range of tools uniquely at their disposal to build the bridge to sustainability.

Some companies also see the potential of JA-ZDCs – and in particular jurisdictional sourcing and jurisdictional certification – to simplify traceability and certification, and to lower the cost of meeting their commitments through efficiencies of scale.

Among climate and forest policymakers with a history in REDD+, there is interest in scaling implementation of private sector commodity commitments to the jurisdictional scale for two primary reasons – they increase the likelihood that government policy makers will get interested and serious about REDD+ programs, and they increase the chances of success once they do. One of the primary lessons learned from jurisdictional REDD+ pilots to date is that “political leaders and land managers require a compelling value proposition to change course—and many do not have one yet” (Fishbein and Lee, 2015). To REDD+ proponents, corporate zero-deforestation commodity commitments may provide another ex ante signal to policy makers that there will be a payoff if they invest political capital, time, and money in lowering deforestation.

Experience also suggests “jurisdictions need ‘packages’ of financing and incentives to encourage and support the pursuit of low-emissions development pathways” (Fishbein and Lee, 2015). Supply-chain commitments have a role to play here as well in “delivering the goods” ex post. The additional incentives may take many forms both before and after REDD+ program development – political cover from powerful industries, the promise of additional investments from the private sector and development banks, and continued market access.

Some of the “pros” of jurisdictional approaches outlined above are illustrated by the following quotes from interviewees:

- *“The only route to transformation is either through governments or with governments.”*
- *“The appeal [to companies] is the promise of simplification of traceability and certification.”*
- *“Other approaches have failed.”*
- *“Certification is mostly just rewarding the good guys, but is not scaling.”*
- *“Site certification has been a fantastic tool for engaging the market, but hasn’t demonstrated scale and is not going to deliver the future [we] want.”*
- *“If we only pay attention to our supply chain, we’ll end up with ‘islands of green’ in a sea of destruction.”*
- *“Certification all the way to the farm is expensive.”*
- *“Jurisdictional approaches shift monitoring costs to governments and elsewhere.”*
- *“Critical risks have to be managed at regulatory level.”*
- *“Traditionally, sustainability was off to the side in CSR departments. For progressive companies, the new view is that sustainability is core to the business... and requires a transformation.”*
- *“Transformation requires one to address the entire supply shed.”*

Many of the interviews also exposed doubts and challenges to JA-ZDCs. In fact, about a quarter of the interviewees had a negative stance towards JA-ZDCs, ranging from dubious to concerned. The majority of interviewees were somewhere between these extremes, recognizing both the opportunities as well as challenges in the approach. The most serious critique is a lack of agreement on definitions of “good enough” – agreement that may be hampered by the inherent conflict between top-down zero-deforestation pledges from buyers and bottom-up multi-stakeholder and multi-sectoral processes creating and agreeing to regionally-defined objectives.

Also noted were several potential misalignments:

- **PHYSICAL MISALIGNMENT** between administrative boundaries and supply sheds, which may make it difficult to drive private sector investment according to jurisdictional-scale programs or performance;
- **TEMPORAL MISALIGNMENT** of government decision-making and corporate decision making, with companies often wanting to act more quickly than governments are able to;
- **TEMPORAL MISALIGNMENT** between rapid observation of deforestation that would push companies to shift demand away from non-performing areas, compared to long-term forward contracts and capital investments that would make such movement difficult; and
- **INSTITUTIONAL MISALIGNMENT** between the ministries responsible for emission reduction and REDD+ programs versus those with responsibility for interfacing with the private sector and agriculture.

There was also concern of misalignment of incentives – that jurisdictional approaches might allow governments to control transformation processes and thus capture benefits without passing them on to producers – reducing incentives available to stimulate change at the production unit level and reducing the support for programs from producers.

Several interviewees noted concerns that a push for jurisdictional or landscape assessment of performance for deforestation might allow or encourage companies and governments to ignore the additional criteria that certifications assess that can’t be assessed from satellites – such as labor practices and land rights – effectively “lowering the bar.”¹ Many noted that companies are often loath to directly engage with governments and

government policy. Finally, one interviewee made a simple critique based on complexity – that layering multiple objectives together may slow progress, and that the private sector might abandon approaches such as certifications that have strengths in favor of unproven approaches.

There were more negative attitudes towards top-down or one-size-fits-all *jurisdictional sourcing approaches* than there were about the broader concept of convergence between jurisdictional approaches and supply chain action. For example, some voiced concerns that global preferential sourcing initiatives would not present a strong enough market signal any time soon to motivate governments toward improved sustainability or provide a clear enough “on-ramp” to non-performing jurisdictions. Others raised the risk of push-back to such signals imposed by global companies and traders if southern governments are not adequately engaged in delineation of the goals and pathway for meeting them.

A few quotes from the interviews give voice to the above conclusions, and combine with the above more positive views to provide a sense of the overall range of assessments of jurisdictional approaches to supply chain sustainability:

- *“It is easy to get to jurisdictional approaches intellectually. It is complicated to get from theory to practice.”*
- *“The push for jurisdictional sourcing is coming primarily from supporters of J-REDD, hoping that it will provide an investment signal.”*
- *“I expect that we will see a growing number of companies back off from their commitments in the next few years”*
- *“Premium is a dirty word to our companies” – implying that a zero-deforestation pledge or certification alone will provide little-to-no incentive at production unit level*
- *“All the other goodies you get with certification may get ignored” – in the context of discussion about labor rights, land tenure, etc.*
- *“[Jurisdictional sourcing is] completely unproven and untested. At least certification is the devil we know.”*
- *“My overall approach is trepidation and caution. We are trying to put together two complex approaches ... this may not be a recipe for accelerating progress.” The two approaches referenced were supply chain approaches and jurisdictional approaches.*
- *“The bigger the scale you act within, the easier it is for problems to sneak through. How will we make a system that is both meaningful, at scale, and robust?”*

EXAMPLES OF JA-ZDC AND “NEAR-JA-ZDC” PROGRAMS AND INITIATIVES

Few if any existing programs or initiatives meet all the criteria above for JA-ZDCs. The Venn diagram of Figure 1 is useful for mapping out how different initiatives, strategies, and stakeholders may vary in their strategies and goals. The following examples are some of the most developed, while also being illustrative of the variety of strategies in the space, visualized in Figure 2.

The Earth Innovation Institute (EII) and its Executive Director Dan Nepstad have been actively working at the intersection of REDD+, sustainable supply chains, and forest country government policy for many years. The institute is a key node in multiple initiatives, pilots, and platforms. For the last three years or so, EII has been developing a **Territorial Performance System** (TPS) with partners in its **Forests, Farms, and Finance Initiative (3Fi)**. The TPS is based on an in-depth argument that proliferating strategies to reducing deforestation would be more effective if linked through integrated performance-based incentive systems connected through a shared metric of jurisdictional performance (Nepstad et al 2013). TPS strategies are just beginning in Caquetá and Guaviare, Colombia; are underway in Central Kalimantan, Indonesia; and are more developed in Mato Grosso, Brazil, which announced its TPS-based “produce, conserve, include” strategy at the Paris COP.

¹ Most jurisdictional REDD+ programs are subject to safeguards requirements, but not necessarily to farm-level verification.

The most recent description of the still-developing TPS framework (EII June 2015) highlights four interconnected components. A multi-stakeholder process builds consensus for regional performance milestones and targets, including for reduced deforestation and for increased production. An integrated system of financial, regulatory, and/or contractual incentives supports both farmers and local governments in working towards these goals. Progress towards milestones is tracked by an online monitoring platform, and a multi-stakeholder governance structure facilitates implementation of the system.

The TPS approach exhibits most of the elements of JA-ZDCs, but is flexible enough that it doesn't require them all. For example, the emphasis on regional performance milestones may result in continued commodity-based forest loss beyond companies' zero-deforestation target dates; however, the Mato Grosso strategy appears to target net-zero forest loss by 2017 or 2018. The TPS also appears in some cases to take a multi-level approach to assessing performance, sliding down to smaller spatial scales in performance assessment when jurisdictions miss their milestones. Preferential sourcing from TPS jurisdictions is one possible source of incentives – it is in play in the Mato Grosso strategy with sourcing linkages being explored with both Norway and China. Overall, the TPS strategy and the Mato Grosso case may represent the most advanced and “prototypical” examples of JA-ZDCs.

On December 2, 2015 at the Paris COP, **Marks & Spencer and Unilever** announced intent “to prioritize our commodity sourcing from areas that have designed and are implementing jurisdictional forest and climate initiatives.” In a publicly released [statement](#), the two companies, which co-chair the Consumer Goods Forum Sustainability Working Group, outlined what they called a “produce and protect” approach that would be supported by “production protection compacts.” The statement recognizes the indispensable role of governments and public-private partnerships and collaboration, as well as the need for solutions “at a jurisdictional (whole landscape) level.” They listed criteria for jurisdictions to qualify for preferential sourcing closely aligned with the requirements for jurisdictional REDD+, but also including a strategy for reducing forest emissions while increasing agricultural productivity.

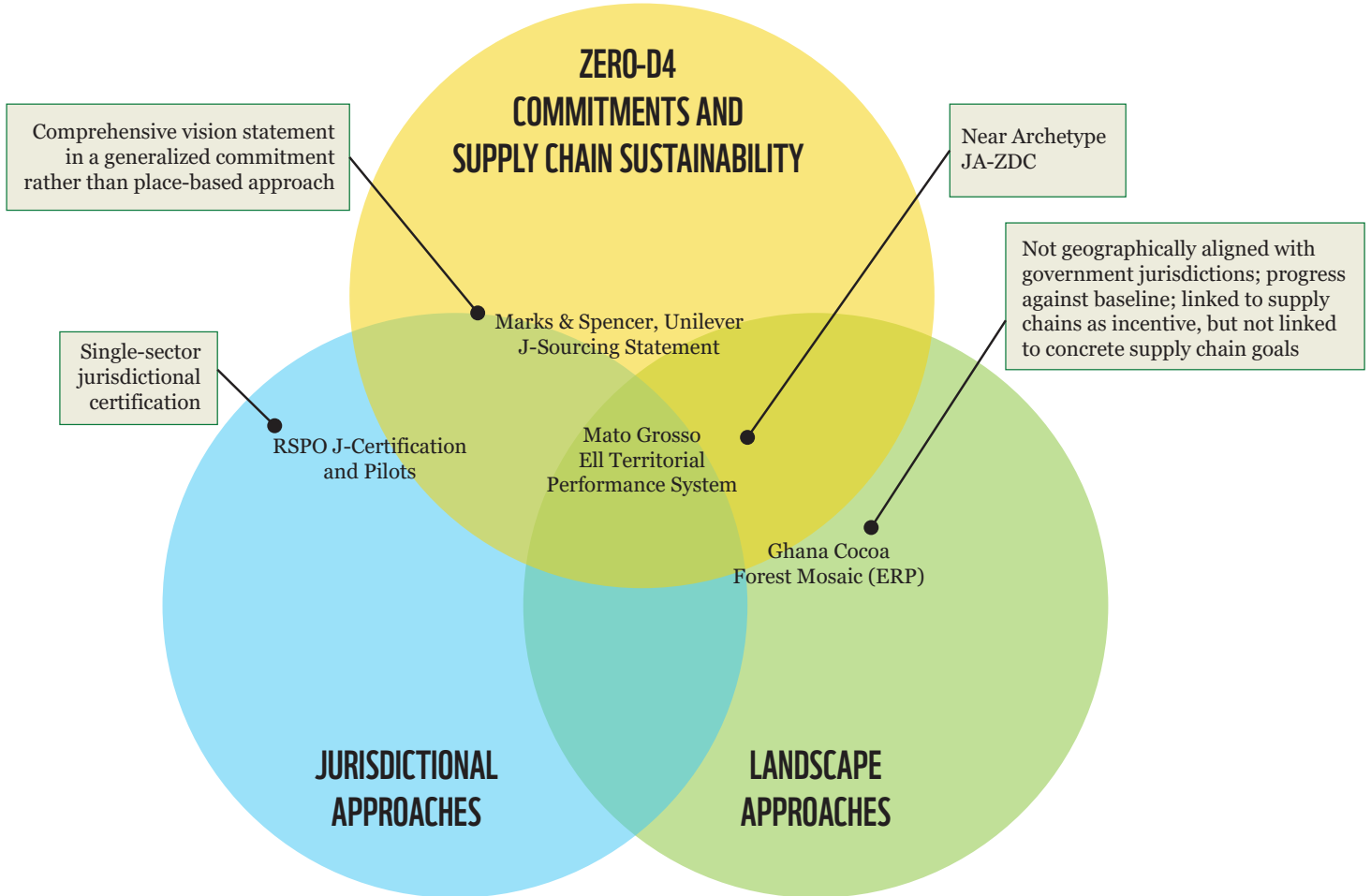
This statement of intent towards jurisdictional preferential sourcing reflects many, but not all, of the elements of JA-ZDCs. Notably, the criteria for preferential sourcing are at least initially more process- than performance-based – jurisdictions must have the critical elements of a REDD+ program in place, including a forest reference level and monitoring system, and then maintain forest-related emissions below this baseline. However, the statement is also explicit that these jurisdictional preferences will be “in addition to and supportive of our current commitments to net zero deforestation.” Together, these suggest that the companies may pursue a multi-level approach, implementing their zero-deforestation commitments at the production unit level while also pursuing a jurisdictional preferential sourcing approach that rewards progress in reducing deforestation at the jurisdictional-scale (though not necessarily achieving jurisdictional-scale net-zero). This example is also qualitatively different than other examples, being a corporate statement of policy, or a global “market demand signal” rather than a specific place-based instance of a jurisdictional approach.

A few days before the RSPO's 13th annual meetings in November of 2015, the State of **Sabah, Malaysia**, launched a 10-year plan to achieve [full jurisdictional RSPO certification](#) of its palm oil production. The Forest Department's proposal of the plan declared that “Government agencies will collaborate closely with the RSPO, Forever Sabah, civil society, community organizations, Malaysian and international private sectors actors, and international philanthropic foundations, to bring technical and financial support...” Several interviewees identified the Sabah-RSPO initiative as one of the most advanced of the jurisdictional approaches to supply chain sustainability. The RSPO is also working with jurisdictional governments and stakeholders in the the Seruyan and Kotawaringin Barat districts of Central Kalimantan and the province of South Sumatra to explore similar jurisdiction-wide certification targets. The RSPO is discussing how it might support these efforts, including consideration of a process to create a jurisdictional-level certification methodology. This process is one of the earliest to consider a jurisdictional-level commodity certification approach in the context of specific demand from producing geographies. The single commodity focus is narrower than a true landscape approach, and the RSPO targets a broader definition of sustainability that doesn't include zero deforestation as a target. Available information suggests extensive stakeholder engagement and a strong role for the jurisdictional governments.

Ghana has been an active participant in global REDD+ processes for many years, with about \$118 million of donor REDD+ finance committed to between 2009 and 2013 and about \$19 million of actual disbursements (Asare 2015). In the spring of 2014 Ghana submitted a proposal (ER-PIN) to the FCPF-CF for an emission reductions program in the [Cocoa Forest Mosaic Landscape](#) – also known as “Ghana's Cocoa Forest REDD+ Program.” This program will be jurisdictional in the sense that it is being developed by the national government – but it is not strictly aligned with the government boundaries of the 5 administrative regions it overlaps. However, it has many of the other hallmarks of JA-ZDCs listed above, including landscape scale

action, multi-stakeholder processes including local and national government and private sector agriculture, a multi-sector approach that engages both cocoa and forestry as well as external supply chain demand, and goals that include both increased farmer output and reduced deforestation (Government of Ghana, 2014). The goals of the ERP fall well short of most private sector zero-deforestation commitments, however, with the program expected to cut baseline deforestation emissions by 20% by 2020 and by 50% by 2027.

Figure 2 - Mapping Example Programs to Strategies



INVENTORY OF JURISDICTIONAL APPROACHES TO ZDCS

The following sections provide information about the most important initiatives pursuing JA-ZDCs or closely related strategies, the geographies where they are being pursued, and the organizations that are most active in advancing them. These lists are compiled from interviews and desk research, and include subjective assessments of both strategy and stage of development. Initiatives were assessed for their alignment with the strategic elements JA-ZDCs listed above as having high, medium, low, or no alignment. If an assessment was not possible due to lack of information the element is noted as unknown, while NA indicates that an element is not applicable to that initiative for some reason. A short summary description of the overall strategy is included for each, using the terms and distinctions developed above.

Stages of development for each initiative were assigned as:

- Idea (conceptual development and initial conversations, potentially seeking early funding),
- Active Development (multiple stakeholders committed to developing concept fully, potentially grant funded),
- Detailed Design (public design documents outlining approach, listing stakeholders, potentially formalized governance, potentially government endorsed, fundraising),
- Start-Up and Implementation (on-the-ground interventions begin, moving beyond stakeholder processes), or
- Mature.

The initiatives are in rough order from left to right of influence and significance in the space. A few initiatives were omitted from Table 1 intentionally. In particular, the [Governor's Climate and Forest Task Force](#) does not appear to be engaged on supply chain approaches beyond its partnerships with EII, so it is not listed separately. The “produce and protect” approach championed by Norway of late is not included as distinct from the platforms where Norwegian funds (and input) are advancing the approach more directly. The [ISEAL Alliance](#) is not included, as it is primarily an information and learning hub across a very wide range of sectors, goals, and standards approaches rather than focused on forests particularly.

While this analysis is intended to be as complete as possible in covering important initiatives at the intersection of jurisdictional, landscape, and supply chain approaches to deforestation, it likely omits other important examples in this rapidly moving space.

TABLE 1. MOST RELEVANT INITIATIVES											
	EII'S FORESTS, FARMS, AND FINANCE INITIATIVE (3FI) AND TERRITORIAL PERFORMANCE SYSTEM (TPS)	MARKS & SPENCER, UNILEVER J-SOURCING COMMITMENT	BIOCARBON FUND INITIATIVE FOR SUSTAINABLE FOREST LANDSCAPES	JURISDICTIONAL RSPO		INDONESIA PALM OIL PLATFORM (INPOP)	BONSUCRO "JURISDICTIONAL LENS"	TRANSFORMATIVE TRANSPARENCY	SUSTAINABLE TROPICS ALLIANCE	TROPICAL FOREST ALLIANCE 2020	TFA 2020 AFRICA PALM OIL INITIATIVE
JA-ZDC Strategic Elements											
Wall-to-wall agenda (no excluded areas)	High	Medium	NA	Unknown		Medium	Unknown	Unknown	Low	NA	NA
Geography relevant to policy	High	High	High	High		High	High	Medium	Medium	NA	Medium
Active participation by jurisdictional governments	High	High	High	High		High	Unknown	None	High	Low	Medium
Recognition of and attempts to reconcile competing social, economic and environmental objectives	High	High	High	Medium		High	Unknown	None	High	High	High
Multi-stakeholder participation	High	High	High	High		High	Medium	None	High	High	High
Multi-sectoral participation and objectives	High	High	High	None		Low	None	High	High	High	High
Active engagement by commodity purchasers outside the jurisdiction	Medium	High	High	High		High	Unknown	None	Medium	High	High
Regionally defined objectives	High	Medium	High	Medium		Unknown	Unknown	None	High	Low	High
Monitoring progress at the jurisdictional scale	High	High	High	High		Unknown	Medium	Medium	Low	NA	NA
Zero-deforestation goal	Medium	Low	None	None		Unknown	Unknown	NA	None	High	Unknown
Preferential sourcing based on jurisdictional progress	Medium	High	Low	Unknown		Unknown	Unknown	NA	Medium	NA	None
Overall Strategy Description	Jurisdictional approach to sustainable commodities	Cross-commodity jurisdictional sourcing commitment; Produce and protect compact as model	Landscape approach to emissions reductions prioritizing private sector engagement	Single commodity jurisdictional certification		National commodity platform	Single commodity multi-level certification	Supply chain transparency platform with jurisdictional lens	Strategic partnership to develop and share low-emissions rural development models	Global multi-stakeholder platform	Platform for defining regional principles for responsible palm oil development
Power Mapping											
Development stage/maturity of concept	Start-Up and Implementation	Active development	Mature	Active development		Start-Up and Implementation	Idea	Start-Up and Implementation	Start-Up and Implementation	Mature	Mature
Development stage/maturity of leading geography or pilot	Start-Up and Implementation	NA	Start-Up and Implementation	Active development		Active development	Idea	Start-Up and Implementation	Start-Up and Implementation	(see next column)	Start-Up and Implementation
Lead or initial convener	EII	Unknown	World Bank CFU	RSPO		Indonesian Government	Bonsucro	SEI	EII	CGF, USG	TFA2020
Involved organizations	EII, RTRS, GRSB, RSPO, Forest Trends, GCF, Solidaridad, Sapopema, IPAM, INOBU, Proforest, Bonsucro, Unilever, WWF, IDH	M&S, Unilever, CGF	World Bank, Funding and Recipient Country Governments	EDF, PILAR, CPI, EII, INOBU, IPOP, GCF, IDH, ZSL		Several dozen partners including Government of Indonesia ministries, development institutions, companies, and NGOs (see www.inpop.id/en/partner-member)	Unknown	GCP (partner); supporters: Both ENDS, CDP, CI, Gibbs Lab, Imaflora, InfoAmazonia, International Institute for Sustainability, Transitions	EII, ProNatura Sur, Green Belt Movement, IPAM, INOBU, IBC, VERTIC	Nearly 70 companies, governments, and NGOs (see www.tfa2020.org/about-tfa/partners/)	Unknown
Funders	Norad, GBMF (Moore), Grantham, Linden Trust for Conservation, and Roger and Vicki Sant	NA	Germany, Norway, UK, US	DFID (IDH, ZSL South Sumatra project)		Government of Indonesia	NA	Sida, EFI, Europe	Norad	WEF (in-kind), US, Norway	Unknown
Participating geographies	Brazil, Indonesia, Colombia, Mexico, Paraguay, Ghana	NA	Orinoquia ecosystem, Colombia; Oromia, Ethiopia (jurisdiction); Eastern Vally, Zambia (jurisdiction); Indonesia in development	Sabah, Malaysia; Suriyan and Kotawaringin Barat Districts in Central Kalimantan, Indonesia; South Sumatra, Indonesia		Riau, South Sumatra, West Kalimantan	NA	Colombian Coffee; Brazilian Soy	Chiapas, Mexico; Pachitea Basin, Peru; Colombia; Mato Grosso, Acre, and Para, Brazil; Kenya; West Papua, Indonesia; Central Kalimantan, Indonesia	Global	Ghana, Liberia, Cote d'Ivoire, Cameroon, Gabon, Nigeria

TABLE 2. ACTIVE GEOGRAPHIES

COUNTRY	SUBNATIONAL GEOGRAPHIES	COMMODITY	INITIATIVE OR PLATFORM NAME OR MODEL	INVOLVED ORGANIZATIONS
Brazil	Mato Grosso	Soy and Beef	Mato Grosso's "Produce, Conserve, and Include" strategy follows TPS model	IPAM, ICV, EDF, EII, Grupo Amaggi, Marfrig, Famato, CIPEN, IDH, Instituto Socioambiental, Agroicone, Norwegian food and feed group
Brazil	Para	Cattle, soy	Green Municipalities Program	Imazon, TNC, IPAM, Vale Fund, Regional federations of Agriculture and Ranching (Faepa), of Municipal Associations (Famep), of Industries (Fiepa), IIEB, ISA, Union of Rural Producers in Paragominas
Brazil	São Paulo	Sugar	Bonsucro "jurisdictional lens"	Unknown
Colombia	Orinoquia/Orinoco	Forestry, cattle, oil palm, soy, sugar, corn	BioCF-ISFL; Amazon Vision	EII, Forest Trends, Fundacion Natura Colombia, WWF-Colombia, Nutresa, UKAid, Norad, WCS, TNC, GIZ
Costa Rica	(national)	Pineapple	National Commodity Platform	UNDP GCP
Dominican Republic	(national)	Cocoa	National Commodity Platform	UNDP GCP
Ethiopia	Oromia	Coffee	BioCF-ISFL; National Commodity Platform	IDH, UNDP
Ghana	High Forest Zone Eco-region ("Cocoa Forest Mosaic Landscape")	Cocoa	FCPF ERP; National Commodity Platform	Solidaridad / UTZ, Rainforest Alliance / SAN, National Cocoa Platform, IUCN-NL, SNV, NCRC, Forest Commission, Olam, Touton, PBC, UNDP
India	Tamil-Nadu	Sugar	Bonsucro "jurisdictional lens"	Unknown
Indonesia	(national)	Palm oil	InPOP; National Commodity Platform	UNDP, RSPO, UNORCID, IDH, Solidaridad, JICA, SNV, Wilmar, GAPKI, KADIN, IKEA, Mondelez, Sucofindo, Tuv Rheinland, PT Astra Agro Lestari, PT SMART, Asian Agri, Musim Mas, Sawit Watch, RAN, Greenpeace, WWF, TNC, CPI, RSPO, EII, ZSL, FP2SB, SPKS, ICALRRD, CIFOR, MAKSI, DMSI, IPB, LPP Yogyakarta Polytechnic College
Indonesia	Central Kalimantan, including Kotawaringin Barat District and Suriyan District	Palm oil	RSPO J-pilot	RSPO, EDF, PILAR, Climate Policy Initiative, EII, INOBU, IPOP, GCF
Indonesia	Riau	Palm oil	General landscape approach	Wilmar, ISPO, UNDP, IDH
Indonesia	South Sumatra	Palm oil	RSPO J-pilot	IDH, ZSL, South Sumatra Eco-Alliance
Indonesia	West Kalimantan, Jambi	Palm oil	Smallholder productivity projects	IDH
Indonesia	West Papua	Palm oil	Spatial planning and Green growth	DFID
Indonesia	5 Districts in North Sumatra	Palm oil	Smallholder projects, Unilever fractionation plant	Unilever, IDH, PTPN III, CPI
Ivory Coast	(national)	Cocoa	FCPF ERP	Olam, Mondelez, Cargill, Cemoi
Liberia	(national)	Palm oil, timber	Bilateral REDD+ agreement with production emphasis	IDH, Norway
Malaysia	Sabah	Palm oil	RSPO J-pilot; SPOTS program	Wilmar, Wild Asia Group, L'oreal, Clariant, Global Amines, IDH
Mexico	Chiapas, Jalisco	Timber, possibly others	Sustainable Tropics Alliance	Pronatura Sur (BirdLife),
Mexico	Yucatan Peninsula	Timber, possibly others	M-REDD	TNC, Rainforest Alliance, ENDESU, WHRC, USAID
Paraguay	(national)	Soy, cattle	Forest Conservation Agriculture Alliance; National Commodity Platform	ADM, Bunge, Cargill, Dreyfus, JBS, USAID, UNDP
Peru	Amazon divisions	Unknown	TPS	EII in very early discussions
Republic of Congo	(national)	Cocoa, Timber, Agroforestry	FCPF ERP	CIB, OLAM, AFD, WCS, CACO-REDD+
Swaziland	(national)	Sugar	Bonsucro "jurisdictional lens"	Unknown
Zambia	Eastern Province (Luangwa Valley)	Cotton, other	BioCF-ISFL (supporting the Zambia Integrated Forest Landscape Program ZIFL-P), Competitive African Cotton Initiative	Multiple donors, including GEF, FIP, others; Cargill

- Note 1.** The information in this table is evolving rapidly and not fully in the public eye; it is thus very likely that some relevant geographies are missing.
- Note 2.** The GEF Integrated Approach Pilot: Taking Deforestation out of Commodity Supply Chains is not an explicitly jurisdictional or landscape scale approach. While some of the geographic implementation projects may have elements of JA-ZDCs, they are not far enough along to identify in the above table.
- Note 3.** The following jurisdictions and eco-regions are actively involved in jurisdictional REDD+ pipelines, but it was not possible to identify linkage to commodity-scale supply chain sustainability as a major theme distinct from the initiatives listed above:
- National bilateral agreements between Norway and Brazil, Colombia, Ethiopia, Guyana, Indonesia, and Peru
 - FCPF ERPs including: Chile, Costa Rica, DRC (Mai Ndombe), Dominican Republic, Fiji, Guatemala, Indonesia, Lao PDR, Madagascar, Mexico, Mozambique, Nepal, Nicaragua, Peru, and Vietnam. While several of these programs include interventions that seek to make wood harvests more sustainable (e.g., DRC, Madagascar, Mozambique, Nepal), most other hallmarks of JA-ZDCs are lacking, and supply chain sustainability elements are not a primary driver of policy approaches outlined
 - VCS JNR pilots including Amazonas in Brazil and Madre de Dios in Peru
 - REDD Early Movers (REM) programs in Acre Brazil, Ecuador, and the Amazon region of Colombia.

TABLE 3. LEADING ORGANIZATIONS

ORGANIZATION	CLOSELY ASSOCIATED STRATEGIES	STRATEGIC NICHE OR TECHNICAL CONTRIBUTION	GEOGRAPHIC ENGAGEMENT
Consumer Goods Forum	Voluntary corporate commitments; TFA 2020; Certifications	Convening and information sharing	Brazil on soy; Asia, West Africa, and Columbia on palm
Earth Innovation Institute (EII)	Territorial Performance System; J-Sourcing	Developing theory and strategy framework for Jurisdictional approaches to sustainability; linking REDD+ and sustainability; moving pilots forward through bottom-up stakeholder processes	GCF states and provinces
Environmental Defense Fund (EDF)	Market-based J-REDD; Zero Deforestation Zones	Linking global brands into REDD+ jurisdictions; J-sourcing; climate and REDD+ policy	Amazon
Global Canopy Programme (GCP)	Sustainable Landscapes	Corporate sustainability policy tracking and issues; links to finance	Global
Governors Climate and Forests Task Force (GCF)	Jurisdictional REDD+	Identifying and creating subnational government leadership; linking carbon markets; building durable policy processes	GCF states
IDH the Sustainable Trade Initiative	Sustainable Landscapes	Financing and implementing increased productivity, esp. smallholders; place-based assessment and action	Indonesia
Rainforest Alliance	Standards & Certification	Defining metrics & norms; making business case for private sector engagement at landscape scale	Global
Solidaridad	Farm-level sustainability and productivity	Bringing companies to sustainability; delivering regionally-tailored commodity sustainability approaches; farm-to-shelf supply chain management	Global
Stockholm Environmental Institute (SEI)	Analysis and tools	Transformative Transparency supply chain tracking tool	Brazilian soy, Colombian coffee in beta release
The Nature Conservancy (TNC)	Land registration; Green Growth Compacts	Jurisdictional approaches broadly; governance and government land management and spatial planning; bottom-up farm and ranch issues	Brazil, Indonesia
WWF	Roundtables, REDD+	Leading corporate giants to sustainability; national and international climate policy; certifications; top-down corporate and government actions; trusted broker and convener; technical partner in development of jurisdictional REDD+ programs	Global

Among even these leading NGOs, just a small handful have been influential in driving the convergence of jurisdictional approaches and supply chain commitments. The Earth Innovation Institute stands out as a thought leader, a doer, and a central node in the space. IDH is very frequently mentioned as an effective implementer and thought leader. TNC, WWF, and EDF are also significant contributors.

3. OBSERVATIONS ON WHETHER AND WHEN JA-ZDCS ARE A PROMISING STRATEGY

Our research suggests that **jurisdictional approaches** broadly are likely to have an increasingly important role in delivering sustainable landscapes with reduced or zero forest loss. It is also clear that **voluntary corporate commodity supply chain commitments** can provide an additional demand signal to governments – both directly and through local producers – for low-deforestation development approaches. Finally, there are early but strong indications that **the convergence of jurisdictional approaches and supply chain commitments is a positive and potentially transformative development**. This convergence can bring some of the most critical stakeholders – producers – to the table. Once at the table, their barriers to sustainable production can be identified and addressed through policy and/or financing levers. Scaling up supply chain approaches to the jurisdiction also potentially provides a strong market signal to governments that have the power and responsibility for managing rural economic growth. Direct engagement by buyers, producers, mills and other private sector stakeholders in jurisdictional processes strengthens these signals.

In broad terms, however, the research also suggests that the narrower category of **jurisdictional sourcing approaches** could face important challenges and limitations in the near-term if they are not carefully implemented. While perhaps over time accountability for deforestation may be assessed at the jurisdictional scale – including potentially through **jurisdictional certifications** – it appears to be a big leap to start with global preferential sourcing commitments. This is due to several reasons. First, external buyers may not have as much leverage on governments as producers and other local stakeholders would have, especially when “premium is a dirty word,” as one buyer put it. Second, there is a risk that an aggressive set of externally-defined corporate targets imposed by buyers on jurisdictional governments and producers would be provocative and risk rejection, as was seen among many Indonesian government officials in response to the first wave of zero-deforestation palm oil commitments. One of the most important lessons from jurisdictional REDD+ is that success requires patient engagement of stakeholders not just in implementation, but in setting the agenda.

This narrower cautionary note does not diminish the potential of the convergence between jurisdictional approaches and supply chain commitments, and suggests steering the “how” more than the “if” in proceeding apace. In most geographies, fully realizing this convergence will require that stakeholders themselves have the opportunity to define regional or jurisdictional milestones and metrics of success. Such bottom-up definitions of success are likely to conflict with current top-down zero-deforestation commitments, some with aggressive timelines. There are two pathways for resolving this conflict, both with risks. One option would be for leading companies to maintain the stringency of their existing ZDCs, tracing and certifying their own supply chains to the farm level while also engaging with and supporting jurisdictional initiatives. A second option would be to build acceptance among stakeholders and campaigning organizations that bottom-up definitions of success (e.g., stepwise approach from reduced deforestation to zero-deforestation) are more appropriate than top-down ones in the context of developing countries and, if strong enough, may in fact be sufficient for companies with ZDCs. In either case, environmental NGOs will continue to participate in these jurisdictional stakeholder processes to ensure that regionally-determined metrics and milestones are as ambitious and environmentally sound as possible.

Regardless, it is clear that one of the most promising elements of JA-ZDCs is to drive commodity businesses (especially producers) and governments to the table with other stakeholders to begin a conversation about shared goals and pathways to getting there. Experience to date suggests that once these stakeholders are at the table, they often are able reach convergence on common goals – especially when the other elements of jurisdictional approaches are already in place and when public support for private sector investment in increased productivity is on the table.

LOOKING AHEAD AT SOME KEY ISSUES

In our view, **priority needs going forward include continued innovation and experimentation in jurisdictional approaches** to sustainable production and **dynamic and transparent platforms** for sharing progress, challenges and lessons learned in these initiatives. Almost all of the examples mapped in this analysis are relatively nascent and for many, the geographic scope, state of progress and/or opportunities for partnerships or company buy-in are not necessarily clear. A more systematic and in-depth assessment of the status and strategies of these existing initiatives, and what they need to succeed, would likely be helpful. Companies also need to be patient and proactive in engaging in these initiatives in the places where they source.

We were also struck by the apparent northern-bias in many discussions around sustainable production and improved governance. Many national and/or subnational forest country governments are obviously engaged in the initiatives summarized here; however, their views, constraints and needs are much less represented in strategic global discussions. **Opportunities that bring together representatives of agriculture, forest, environment and planning ministries to articulate what they need and expect from private sector and/or NGO partnerships to achieve sustainable development goals and NDCs will be critical** to balance the conversation and identify viable ways forward.

On the more technical side, there is tremendous experience at scaling and verifying best management practices under multiple certification schemes, but apparently **little systematic analysis of how to take these lessons to scale and/or overlay farm- and plantation-level standards and progress in traceability with jurisdictional approaches that engage governments and incentivize land policy reform and/or implementation more broadly**. For example, what are the most compelling examples of embedding certification criteria into land policy frameworks? How should companies prioritize sourcing between a certified producer in a non-performing jurisdiction versus a non-certified producer in a well-performing jurisdiction? Jurisdictional approaches also open up opportunities to simultaneously address multiple commodity drivers of deforestation, which raises unique technical challenges. Jurisdictional certification pilots are an exciting testing space, but additional analysis and research is needed if they are to successfully include multi-commodity approaches.

Finally, increased interest in jurisdictional approaches to zero-deforestation commodities is fueled in part by the premise that climate finance can be harnessed to support the necessary on-the-ground work, e.g., in land use planning, training and extension services, to stem illegality and expand uptake of best management practices. Private sector actors are reluctant to commit themselves to slow moving bilateral and multilateral finance agreements; however, public climate finance can improve enabling conditions and pave the way for increased private sector investment in sustainable production practices. A number of initiatives described here, most notably under the ISFL, are testing this idea directly as will newly approved [Green Climate Fund](#) programs in [Ecuador](#) and [Madagascar](#); all will provide important lessons in coming years.

What is clear is that successfully scaled sustainable land use strategies will require leveraging and integration of multiple funding sources (Streck and Murray 2015), and these numerous jurisdictional pilots will be as much a test in innovative finance as they will of cooperative action.

APPENDIX 1: BIBLIOGRAPHY


- Asare, R.A. May 2015. "The impacts of international REDD+ finance: Ghana case study."
- Arif, Joko. nd. "Jurisdictional certification approach to support sustainable palm oil production." INOBU, EII.
- Beckham, S., Krasny, S, Nuvunga, M., Sizer, N., and Taylor, R. October 2014. "Scoping dialogue on understanding deforestation-free: Co-Chairs' Summary Report." New Haven, CT.
- Brasser, A. 2013. "Olam International and Rainforest Alliance Case Study. Reducing Risk: Landscape Approaches to Sustainable Sourcing." Washington, DC. EcoAgriculture Partners, on behalf of the Landscapes for People, Food and Nature Initiative.
- CPI, IDH, and Unilever. June 2015. "Achieving a high-productivity, sustainable palm oil sector in Indonesia: a landscape management approach."
- Daemeter. nd. "Jurisdictional approaches to reducing palm oil driven deforestation in Indonesia: Scoping study of design considerations and geographic priorities. Extended Summary."
- Denier, L., Scherr, S., Shames, S., Chatterton, P., Hovani, L., Stam, N. 2015. *The Little Sustainable Landscapes Book*. Global Canopy Programme: Oxford.
- EII. June 2015. "Territorial Performance System: A framework for driving large-scale, jurisdictional transitions to low-emission rural development in the tropics."
- EII. October 2015. "Mato Grosso: Brazil's agricultural giant on the pathway to state-wide sustainability."
- EII. 2016. "Making corporate deforestation pledges work."
- EII, Forest Trends, Fundacion Natura Colombia, WWF-Colombia. Various program documents supporting the Colombian Amazon Vision.
- Fishbein, G., and Lee, D. January 2015. "Early Lessons from Jurisdictional REDD+ and Low Emissions Development Programs." TNC, FCPF, and The World Bank Group. Arlington.
- Government of Mato Grosso, Brazil. December 2015. "Produce, conserve, and include: Strategy of Mato Grosso to reduce global warming."
- Government of Ghana. April, 2014. "Ghana ER-PIN Final Presentation: Ghana's Emission Reductions Program for the Cocoa Forest Mosaic Landscape."
- Gyau, A., Oduol, J., Mbugua, M., Foundjem-Tita, D., Ademonla Arinloye, D., & Kouame, C. 2015. "Landscape approaches to sustainable supply chain management: the role of agribusinesses." In Minang, P. A., et al (Eds.) *Climate-Smart Landscapes: Multifunctionality in Practice*, 295-305. Nairobi, Kenya: World Agroforestry Centre (ICRAF).
- IPAM, AMAZON, EDF, & ISA. February 2015. "A pathway to zero deforestation in the Amazon: A common vision."
- Kissinger, G., A. Brasser, and L. Gross. 2013. "Scoping study. Reducing Risk: Landscape Approaches to Sustainable Sourcing." Washington, DC. Landscapes for People, Food and Nature Initiative.
- Kissinger, G., Moroge, M., & Noponen, M. 2015. "Private sector investment in landscape approaches: the role of production standards and certification." In Minang, P. A., et al (Eds.) *Climate-Smart Landscapes: Multifunctionality in Practice*, 277-293. Nairobi, Kenya: World Agroforestry Centre (ICRAF).
- Mallet, P., Maireles, M., Kennedy, E., and Devisscher, M. April 2016. "ISEAL Report: How sustainability standards can contribute to landscape approaches and zero deforestation commitments."
- Marks & Spencer, Unilever. December 2015. "Statement from Consumer Goods Forum Co-chairs, acting individually: production protection."
- Nepstad, D., Irawan, S., Bezerra, T., Boyd, W., Stickler, C., Shimada, J., ... & Azevedo, A. 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), 639-658.
- The Norwegian Round-Table on Sustainable Soy. October, 2015. "The Norwegian Commitments on Sustainable Soy and Forests." Oslo, Norway.
- Smit, H., R. McNally, & A. Gijzenbergh. February 2015. "Implementing deforestation-free supply chains – certification and beyond." REAP and SNV.
- Streck, C., and Lee, D. March 2016. "Partnering for results: Public-private collaboration on deforestation-free supply chains." Prepared with support from cooperative agreement # S-LMAQM-13-CA-1128 with U.S. Department of State.
- Streck, C., Murray, B., Aquino, A., Durschinger, L., Estrada, M., Parker C., and Zeleke, A. 2015. "Financing Land Use Mitigation: A Practical Guide for Decision-Makers." Prepared with support from cooperative agreement # S-LMAQM-13-CA-1128 with U.S. Department of State.
- Sustainable Tropics Alliance. nd. *Untitled Fact Sheet*. www.sustainabletropics.org

ACKNOWLEDGEMENTS

This paper is based in large part on the views and experience of numerous experts who generously contributed their time through interviews or other exchanges with the lead author.

Many thanks to Marco Albani, Fitriani Ardiansyah, Lucy Aquino, Elly Baroudi, Maria Ximena Barrerra, Aditya "Dito" Bayunanda, William Boyd, Jason Clay, Greg Fishbein, Ignacio Gavilan, Jeff Hayward, Jonathan Horrell, Frederico Machado, Toby McGrath, David McLaughlin, Chris Meyer, Edward Millard, Melissa Miners, Dan Nepstad, Geraldine O'Grady, Edegar Oliviera, Lizzie Schueler, Neil Scotland, Guillermo Terol, Vedis Vik, Zulfira Warta, and Fiona Wheatley.

This discussion paper was prepared by Michael Wolosin of Forest Climate Analytics on behalf of WWF US with input from WWF network and external experts. It provides information and analysis for consideration by interested stakeholders and to promote additional discussion. It does not represent a policy position of WWF.

	<p>Why we are here</p> <p>To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.</p> <hr/> <p>panda.org/forestclimate</p>
---	---

FOR FURTHER INFORMATION

panda.org/forestclimate